

305                      310                      315                      320  
Ile Asp Asn Leu Asn Leu Ser Phe Arg Lys Glu Asp Arg Ser Phe Ser  
                         325                      330                      335  
Gly Cys Leu Pro Leu Pro Lys Val Arg Ala Ile Cys Gly Lys His Gly  
                         340                      345                      350  
Leu Tyr Leu Thr Leu Ser Leu Leu Glu Thr Leu Leu Asn His Gln Asp  
                         355                      360                      365  
Leu Gly Tyr Gln Asn Glu Ile Lys Trp Gln Asn Phe Val Glu Met Leu  
                         370                      375                      380  
Thr Arg Ala Ser Ser Asp Leu Leu Ser Asp Leu Pro Thr Gly Lys Asn  
385                      390                      395                      400  
Glu Lys Lys Ala Pro Ala Pro Pro Met Glu Pro Glu Val Pro Glu Met  
                         405                      410                      415  
Ser Gln Ser Lys Thr Glu His Met Lys Thr Pro Glu Glu Glu Leu Gln  
                         420                      425                      430  
Pro Glu Ser Ser Pro Ala Glu Thr Ser Ala Cys Lys Asp Pro Leu Lys  
                         435                      440                      445  
Pro Leu Lys Ile Arg Pro Val Ser Gln Pro Phe Val Asn Pro Ala Val  
                         450                      455                      460  
Lys Asn Lys Ala Glu Glu Cys Glu Thr Trp Ile Asp Arg Phe Arg Lys  
465                      470                      475                      480  
Leu Glu Asn Ala Leu Tyr Leu Cys Asp Leu Ser Asn Thr Gly Val Leu  
                         485                      490                      495  
Glu Lys Glu Arg Ala Arg Arg Leu Ile His Asn Tyr Asn Leu Ile Tyr  
                         500                      505                      510  
Asn Leu Ser Leu Ser Pro Gln Lys Ile Asp Gln Ala Leu Arg Arg Phe  
                         515                      520                      525  
Arg Ser Gly Glu Asn Met Leu Leu Glu Pro Ala Leu Arg Tyr Leu Lys  
                         530                      535                      540

Glu Leu

545

&lt;210&gt; 2610

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2610

Met Pro Gly Lys Pro Lys His Leu Gly Val Pro Asn Gly Arg Met Val

1

5

10

15

Leu Ala Val Ser Asp Gly Glu Leu Ser Ser Thr Thr Gly Pro Gln Gly

20

25

30

Gln Gly Glu Gly Arg Gly Ser Ser Leu Ser Ile His Ser Leu Pro Ser

35

40

45

Gly Pro Ser Ser Pro Phe Leu Ala Phe Val Ser Ser Lys Ser Glu Ser

50

55

60

His Arg Lys Ser Leu Gly Ser Thr Glu Gly Glu Ser Glu Ser Arg Pro

65

70

75

80

Gly Lys Tyr Cys Cys Val Tyr Leu Pro Asp Gly Thr Ala Ser Leu Ala

85

90

95

Leu Ala Arg Pro Gly Leu Thr Ile Arg Asp Met Leu Ala Gly Ile Cys

100

105

110

Glu Lys Arg Gly Leu Ser Leu Pro Asp Ile Lys Val Tyr Leu Val Gly

115

120

125

Asn Glu Gln Lys Ala Leu Val Leu Asp Gln Asp Cys Thr Val Leu Ala

130

135

140

Asp Gln Glu Val Arg Leu Glu Asn Arg Ile Thr Phe Glu Leu Glu Leu

145	150	155	160
Thr Ala Leu Glu Arg Val Val Arg Ile Ser Ala Lys Pro Thr Lys Arg			
	165	170	175
Leu Gln Glu Ala Leu Gln Pro Ile Leu Glu Lys Arg Gly Leu Ser Pro			
	180	185	190
Leu Glu Val Val Leu His Arg Pro Gly Glu Lys Gln Pro Leu Asp Leu			
	195	200	205
Gly Lys Leu Val Ser Ser Val Ala Ala Gln Arg Leu Val Leu Asp Thr			
	210	215	220
Leu Pro Gly Val Lys Ile Ser Lys Ala Arg Asp Lys Ser Pro Cys Arg			
225	230	235	240
Ser Gln Gly Cys Pro Pro Arg Thr Gln Asp Lys Ala Thr His Pro Pro			
	245	250	255
Pro Ala Ser Pro Ser Ser Leu Val Lys Val Pro Ser Ser Ala Thr Gly			
	260	265	270
Lys Arg Gln Thr Cys Asp Ile Glu Gly Leu Val Glu Leu Leu Asn Arg			
	275	280	285
Val Gln Ser Ser Gly Ala His Asp Gln Arg Gly Leu Leu Arg Lys Glu			
	290	295	300
Asp Leu Val Leu Pro Glu Phe Leu Gln Leu Pro Ala Gln Gly Pro Ser			
305	310	315	320
Ser Glu Glu Thr Pro Pro Gln Thr Lys Ser Ala Ala Gln Pro Ile Gly			
	325	330	335
Gly Ser Leu Asn Ser Thr Thr Asp Ser Ala Leu			
	340	345	

&lt;210&gt; 2611

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2611

Met Ile Ala Gly Ser Gly Thr Arg Ala His Ala Arg Ala Arg Leu Trp  
1 5 10 15  
Asp Pro Trp Leu Ile Asp Gly Pro Cys Ser Pro Arg Asn Leu Val Pro  
20 25 30  
Ala Ala Pro Ser Ala Pro Arg Thr Ala Val Arg Leu Ser Arg Leu Val  
35 40 45  
Pro Ala Gly Asn Ser Val Arg Cys Gly Ala Leu Asp Ala Ala Pro Gly  
50 55 60  
Gln Arg Ser Gly Pro Thr Val Ala Ala Gly Phe Pro Gln Gly Gly Ala  
65 70 75 80  
Arg Ala Arg Ala Thr Pro Arg Arg Leu Pro Gly His Arg Arg Pro Arg  
85 90 95  
Gly Ala Arg Gly Ala Gln Arg Gly Gly Ser Pro Asp Ser Ala His Gly  
100 105 110  
Ser Arg Pro Ala Glu Ala Gly Val Ser Ala Gln Cys Arg Glu Met  
115 120 125

&lt;210&gt; 2612

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2612

Met Ala Ala Ser Gly Arg Gly Leu Cys Lys Ala Val Ala Ala Ser Pro



1	5	10	15
Phe	Pro	Ala	Trp
Arg	Arg	Asp	Asn
Thr	Glu	Ala	Arg
Gly	Gly	Leu	Lys
20	25	30	
Pro	Glu	Tyr	Asp
Ala	Val	Val	Ile
Gly	Ala	Gly	Lys
Val	Val	Lys	Gln
35	40	45	
Ala	Gly	Pro	Glu
Leu	Arg	Gly	Gly
Lys	Thr	Ala	Leu
Leu	Arg	Ala	Trp
50	55	60	
Trp	Gly	Gly	Gly
Gly	Gly	Ala	Lys
Pro	His	Cys	Ser
Leu	Leu	Trp	His
65	70	75	80
Asn	Pro	Ala	Arg
Ser	Leu	Tyr	Ala
Ser	Arg	Gly	Cys
Asn	Gly	Lys	Pro
85	90	95	
Phe	His	Leu	Ala
Gly	Arg	His	Leu
Gly	Phe	Arg	Cys
Trp	Leu	Cys	Cys
100	105	110	
Val	Ala	Trp	Gly
Lys	Cys	Leu	Pro
Ser	Leu	Gly	Leu
Asp	Leu	Pro	Met
115	120	125	
Glu	Asn	Asp	Arg
Lys	Thr	Arg	
130	135		

&lt;210&gt; 2613

&lt;211&gt; 575

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2613

Met	Ala	Thr	Thr	Ala	Thr	Cys	Thr	Arg	Phe	Thr	Asp	Asp	Tyr	Gln	Leu
1	5	10	15												
Phe	Glu	Glu	Leu	Gly	Lys	Cys	Val	Lys	Lys	Thr	Ser	Thr	Gln	Glu	Tyr
20	25	30													

Ala Ala Lys Ile Ile Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln  
35 40 45  
Lys Leu Glu Arg Glu Ala Arg Ile Cys Arg Leu Leu Lys His Pro Asn  
50 55 60  
Ile Val Arg Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu  
65 70 75 80  
Val Phe Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala  
85 90 95  
Arg Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile His Gln Ile  
100 105 110  
Leu Glu Ser Val Asn His Ile His Gln His Asp Ile Val His Arg Asp  
115 120 125  
Leu Lys Pro Glu Asn Leu Leu Leu Ala Ser Lys Cys Lys Gly Ala Ala  
130 135 140  
Val Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln Gly Glu Gln  
145 150 155 160  
Gln Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr Leu Ser Pro Glu  
165 170 175  
Val Leu Arg Lys Asp Pro Tyr Gly Lys Pro Val Asp Ile Trp Ala Cys  
180 185 190  
Gly Val Ile Leu Tyr Ile Leu Leu Val Gly Tyr Pro Pro Phe Trp Asp  
195 200 205  
Glu Asp Gln His Lys Leu Tyr Gln Gln Ile Lys Ala Gly Ala Tyr Asp  
210 215 220  
Phe Pro Ser Pro Glu Trp Asp Thr Val Thr Pro Glu Ala Lys Asn Leu  
225 230 235 240  
Ile Asn Gln Met Leu Thr Ile Asn Pro Ala Lys Arg Ile Thr Ala Asp  
245 250 255  
Gln Ala Leu Lys His Pro Trp Val Cys Gln Arg Ser Thr Val Ala Ser

260 265 270  
Met Met His Arg Gln Glu Thr Val Glu Cys Leu Arg Lys Phe Asn Ala  
275 280 285  
Arg Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Val Ser Arg  
290 295 300  
Asn Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys Lys Ser Asp Gly Gly  
305 310 315 320  
Val Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu Val Ser Pro Ala Gln  
325 330 335  
Glu Pro Ala Pro Leu Gln Thr Ala Met Glu Pro Gln Thr Thr Val Val  
340 345 350  
His Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr Glu Ser Cys Asn Thr  
355 360 365  
Thr Thr Glu Asp Glu Asp Leu Lys Ala Ala Pro Leu Arg Thr Gly Asn  
370 375 380  
Gly Ser Pro Val Pro Glu Gly Arg Ser Ser Arg Asp Arg Thr Ala Pro  
385 390 395 400  
Ser Ala Gly Met Gln Pro Gln Pro Ser Leu Cys Ser Ser Ala Met Arg  
405 410 415  
Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu Ile Glu Ala Ile Asn  
420 425 430  
Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys Asp Pro Gly Leu Thr  
435 440 445  
Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly Met Asp Phe  
450 455 460  
His Lys Phe Tyr Phe Glu Asn Arg Glu Trp Val Arg Ala Ala Asp Ile  
465 470 475 480  
Leu Leu Pro Ala Pro Leu Pro Leu Cys Leu Cys Leu Leu Leu Thr Phe  
485 490 495

Ser Ser Gln Leu Pro Thr Phe Pro Leu Phe Asp Leu Arg Ala Ala Leu  
 500 505 510  
 Leu Leu Cys Met Leu Val Pro Leu Cys Pro Asp Gly Cys Arg Gln Ala  
 515 520 525  
 Pro Leu Lys Ala Leu Leu Leu Ser Ser Lys Cys His Ser Phe Cys Ser  
 530 535 540  
 Cys Phe Val Ala Val Pro Val Thr Thr Ile Lys Leu Thr Tyr Phe Leu  
 545 550 555 560  
 Pro Gly Ala Val Ala Tyr Ala Cys Asn Pro Asn Thr Leu Gly Gly  
 565 570 575

<210> 2614

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2614

Met Glu Ala Gln Pro Gly Lys Lys Val Gly Lys Gly Asp Arg Val Phe  
 1 5 10 15  
 Gly Val Gly Leu Asn Val Met Leu Thr Phe Pro Glu Glu Ser Trp Pro  
 20 25 30  
 Val Pro Thr Gln Gly Thr Gly Arg Cys Leu Glu Ala Ala Ala Thr Gly  
 35 40 45  
 Gly Pro Arg Ser Ser Ala Gln Arg Pro Arg Pro Arg Ala Leu Ala Gly  
 50 55 60  
 Gly Glu Ser Ser Gly Cys Trp Ser Trp Gly Leu Arg Gly Ser Trp Glu  
 65 70 75 80  
 Leu Gln Ala Trp Trp Ala Trp Gly Trp Gly Gly Glu Gly Gly Gln Ser

85 90 95  
 Ser His Arg Pro  
 100

<210> 2615

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2615

Met Cys Gly Trp Ala Ala Tyr Leu Met Arg Glu Pro Pro Pro Lys Pro  
 1 5 10 15  
 Glu Pro Ser Ser Leu Cys Gly Gln His Pro Gly Arg Pro Gly Gly Ala  
 20 25 30  
 Ala Ser Pro Ala Pro Thr Pro Ser Ala Trp Cys Trp Pro Val Ala Pro  
 35 40 45  
 Glu Pro Leu Thr Ser Pro Val Arg Gly Leu Gly Pro Ser Pro Gly Pro  
 50 55 60  
 Trp Trp Gln Leu Pro Val Ala Gln Ala Ala Cys Pro Ala Pro Arg Val  
 65 70 75 80  
 Glu Val Glu Leu Arg Gly Leu Leu Leu Gln Gly Ala Glu Gly Gln Arg  
 85 90 95  
 Pro Gly Phe Gly Tyr Gly Gly Arg Ala Ser Asp Tyr Lys Ser Ala His  
 100 105 110  
 Lys Gly Phe Lys Gly Val Asp Ala Gln Gly Thr Leu Ser Lys Ile Phe  
 115 120 125  
 Lys Leu Gly Gly Arg Asp Ser Arg Ser Gly Ser Pro Met Ala Arg Arg  
 130 135 140

&lt;210&gt; 2616

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2616

Met Ala Val Arg Glu Lys Val Phe Asp Val Ile Ile Arg Cys Phe Lys

1 5 10 15

Arg His Gly Ala Glu Val Ile Asp Thr Pro Val Phe Glu Leu Lys Glu

20 25 30

Thr Leu Met Gly Lys Tyr Gly Glu Asp Ser Lys Leu Ile Tyr Asp Leu

35 40 45

Lys Asp Gln Gly Gly Glu Leu Leu Ser Leu Arg Tyr Asp Leu Thr Val

50 55 60

Pro Phe Ala Arg Tyr Leu Ala Met Asn Lys Leu Thr Asn Ile Lys Arg

65 70 75 80

Tyr His Ile Ala Lys Val Tyr Arg Arg Asp Asn Pro Ala Met Thr Arg

85 90 95

Gly Arg Tyr Arg Glu Phe Tyr Gln Cys Asp Phe Asp Ile Ala Gly Asn

100 105 110

Phe Asp Pro Met Ile Pro Asp Ala Glu Cys Leu Lys Ile Met Cys Glu

115 120 125

Ile Leu Ser Ser Leu Gln Ile Gly Asp Phe Leu Val Lys Val Asn Asp

130 135 140

Arg Arg Ile Leu Asp Gly Met Phe Ala Ile Cys Gly Val Ser Asp Ser

145 150 155 160

Lys Phe Arg Thr Ile Cys Ser Ser Val Asp Lys Leu Asp Lys Val Ser

165	170	175
Trp Glu Glu Val Lys Asn Glu Met Val Gly Glu Lys Gly Leu Ala Pro		
180	185	190
Glu Val Ala Asp Arg Ile Gly Asp Tyr Val Gln Gln His Gly Gly Val		
195	200	205
Ser Leu Val Glu Gln Leu Leu Gln Asp Pro Lys Leu Ser Gln Asn Lys		
210	215	220
Gln Ala Leu Glu Gly Leu Gly Asp Leu Lys Leu Leu Phe Glu Tyr Leu		
225	230	235
240		
Thr Leu Phe Gly Ile Asp Asp Lys Ile Ser Phe Asp Leu Ser Leu Ala		
245	250	255
Arg Gly Leu Asp Tyr Tyr Thr Gly Val Ile Tyr Glu Ala Val Leu Leu		
260	265	270
Gln Thr Pro Ala Gln Ala Gly Glu Glu Pro Leu Gly Val Gly Ser Val		
275	280	285
Ala Ala Gly Gly Arg Tyr Asp Gly Leu Val Gly Met Phe Asp Pro Lys		
290	295	300
Gly Arg Lys Val Pro Cys Val Gly Leu Ser Ile Gly Val Glu Arg Ile		
305	310	315
320		
Phe Ser Ile Val Glu Gln Arg Leu Glu Ala Leu Glu Glu Lys Ile Arg		
325	330	335
Thr Thr Glu Thr Gln Val Leu Val Ala Ser Ala Gln Lys Lys Leu Leu		
340	345	350
Glu Glu Arg Leu Lys Leu Val Ser Glu Leu Trp Asp Ala Gly Ile Lys		
355	360	365
Ala Glu Leu Leu Tyr Lys Lys Asn Pro Lys Leu Leu Asn Gln Leu Gln		
370	375	380
Tyr Cys Glu Glu Ala Gly Ile Pro Leu Val Ala Ile Ile Gly Glu Gln		
385	390	395
400		

Glu Leu Lys Asp Gly Val Ile Lys Leu Arg Ser Val Thr Ser Arg Glu

405

410

415

Glu Val Asp Val Arg Arg Glu Asp Leu Val Glu Glu Ile Lys Arg Arg

420

425

430

Thr Gly Gln Pro Leu Cys Ile Cys

435

440

<210> 2617

<211> 175

<212> PRT

<213> Homo sapiens

<400> 2617

Met Pro Gln Trp Leu Val Ala Ser Ile Ile Pro Gly Cys Val Cys Glu

1

5

10

15

Ser Val Ser Arg Gly Asp Ser His Val Ser Gln Arg Ala Glu Lys Glu

20

25

30

Thr Arg Ser Gln Cys Glu Cys Ala Leu Ser Asn Gln Leu Lys Ala Arg

35

40

45

Leu Gly Thr Asn Arg Gln Lys Lys Glu Asp Ser Leu Ser His Leu Ser

50

55

60

Gly Ala Gly Cys Leu Phe Ser Leu Asp Ile Arg Leu Gln Gly Leu Trp

65

70

75

80

Leu Leu Asp Ser Arg Thr Cys Thr Asn Gly Leu Pro Gly Pro Ser Gly

85

90

95

Leu Gln Pro Pro Thr Lys Val Cys Ala Val Gly Leu Pro Asp Ser Glu

100

105

110

Ala Ser Gly Leu Gly Leu Arg His Ala Thr Gly Phe Ser Asp Ser Pro



115	120	125
Ala Cys Gly Trp Pro Ile Met Gly Leu Leu His Leu Cys Asn His Lys		
130	135	140
Gly Gln Cys Pro Leu Ile Pro Phe Phe Ser Tyr Ile Leu Leu Val Leu		
145	150	155
Ser Ala Trp Gly Thr Leu Thr Asn Thr Asp Met Glu His Leu Lys		
165	170	175

&lt;210&gt; 2618

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2618

Met Gly Glu Met His Arg His Ala Cys Glu Ala Trp Gly Pro Ser Leu		
1	5	10
Pro Leu Pro Cys Pro Leu Ser Pro Pro Thr Pro Gly Gln Pro Gln Glu		
20	25	30
Arg Gly Ser Val Ala Ser Leu Ala Gln Arg Arg Gly Ser Val Ala Thr		
35	40	45
Trp Thr Pro Ala Ser Gly Thr Ala Glu Arg Pro Leu Arg Asn Ala Asp		
50	55	60
Pro Pro Ser Arg Leu Lys His Thr Leu Arg Leu Pro Leu Leu Pro Leu		
65	70	75
Glu Phe Gly Ser Ser Phe Leu Thr Gln Thr His Ser Cys Ser Gly Gly		
85	90	95
Gln Gly Gly Arg Asp Thr His Ala Ala Ser Leu Leu Pro Pro Arg Ala		
100	105	110

Gly Asp Cys Pro

115

&lt;210&gt; 2619

&lt;211&gt; 614

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2619

Met Met Arg Gln Ala Thr Met Asp Phe Ser Thr Pro Ser Val Phe Asp

1

5

10

15

Gln Gln Arg Gly Asp Ser Ser Glu Glu Val Asp Leu Thr Met Val Tyr

20

25

30

Gln Ala Ala Ser Asn Gly Asp Val Asn Ala Leu Thr Ala Val Ile Arg

35

40

45

Glu Asp Pro Ser Ile Leu Glu Cys Cys Asp Ser Glu Gly Cys Thr Pro

50

55

60

Leu Met His Ala Val Ser Gly Arg Gln Ala Asp Thr Val Lys Leu Leu

65

70

75

80

Leu Lys Met Gly Ala Asn Ile Asn Met Gln Asp Ala Tyr Gly Arg Thr

85

90

95

Ser Leu Cys Leu Ala Thr Tyr Leu Gly Trp Leu Glu Gly Cys Val Ser

100

105

110

Leu Leu Arg Asn Gly Ala Lys His Asn Ile Pro Asp Lys Asn Gly Arg

115

120

125

Leu Pro Leu His Ala Ala Thr Ala Glu Pro Asp Met Arg Leu Leu Thr

130

135

140

Val Leu Leu Gln Gln Ser Asn Ile Ser Glu Ile Asn His Gln Asp Asn

145                      150                      155                      160  
Glu Gly Met Thr Pro Leu His Trp Ala Ala Phe His Asn Gln Pro Gln  
                         165                      170                      175  
His Thr Gln Met Leu Leu Lys Lys Gly Ala Asp Pro Thr Leu Val Asp  
                         180                      185                      190  
Lys Asp Phe Lys Thr Ala Leu His Trp Ala Val Gln Ser Gly Asn Arg  
                         195                      200                      205  
Ile Leu Cys Ser Ile Ile Leu Ser His His Gln Gly Pro Ser Ile Ile  
                         210                      215                      220  
Asn Tyr Asp Asp Glu Ser Gly Lys Thr Cys Val His Ile Ala Ala Ala  
225                      230                      235                      240  
Ala Gly Phe Ser Asp Ile Ile His Glu Leu Ala Arg Val Pro Glu Cys  
                         245                      250                      255  
Asn Leu Gln Ala Leu Asp Val Asp Asp Arg Thr Pro Leu His Trp Ala  
                         260                      265                      270  
Ala Ala Ala Gly Lys Ala Glu Cys Val Gln Ser Leu Leu Glu Leu Gly  
                         275                      280                      285  
Met Asp Ser Asn Leu Arg Asp Ile Asn Glu Ser Thr Pro Leu Ala Tyr  
                         290                      295                      300  
Ala Leu Tyr Cys Gly His Thr Ala Cys Val Lys Leu Leu Ser Gln Glu  
305                      310                      315                      320  
Ser Arg Thr Glu Pro Thr Arg Pro Pro Pro Ser Gln Ser Ser Arg Pro  
                         325                      330                      335  
Gln Lys Lys Glu Arg Arg Phe Asn Val Leu Asn Gln Ile Phe Cys Lys  
                         340                      345                      350  
Asn Lys Lys Glu Glu Gln Arg Ala His Gln Lys Asp Pro Ser Arg Asp  
                         355                      360                      365  
Arg Tyr Arg Glu Glu Asp Thr Ser Glu Val Asn Asp Ile Ile Thr Thr  
                         370                      375                      380

Phe Asp Ser Ile Val Gly Thr Asn Cys Gln Glu Gln Pro Gly Asp Gln  
385 390 395 400  
Val Ala Met Val Glu Phe Lys Lys Lys Thr Ser Asp Asn Ser Lys Tyr  
405 410 415  
Leu Leu Pro Glu Lys Lys Pro Leu Ala Arg Lys Gly Leu Pro Pro Ile  
420 425 430  
Arg Thr Gln Ser Leu Pro Pro Ile Thr Leu Gly Asn Asn Phe Leu Thr  
435 440 445  
Ala Ser His Arg Ala Thr Ser His Ala Gly Leu Ser Ser Ala Pro His  
450 455 460  
His Met Ala Gln Arg Ser Gln Lys Ser Arg Ser Glu Gln Asp Leu Leu  
465 470 475 480  
Asn Asn Arg Thr Gly Cys Gln Met Leu Leu Asp Asn Pro Trp Lys Ser  
485 490 495  
Asp Ser Asn Gln Val Phe Ser Tyr Lys Val Trp Thr Val Ser Ser Ser  
500 505 510  
Asp Lys Leu Leu Asp Arg Leu Leu Ser Val Arg Pro Gly His Gln Glu  
515 520 525  
Val Ser Val Pro Pro His Leu Arg His Leu His Asn Pro Ser Ser Gly  
530 535 540  
Gln Asn Phe Gln His Leu Ser Pro Asn Arg His Lys Ile Arg Asp Leu  
545 550 555 560  
Pro Phe Thr Arg Asn Asn Leu Ala Pro Leu Pro Asp Gln Lys Phe Leu  
565 570 575  
Ser Gly Glu Pro Leu Arg Thr Asn Arg Val Leu Pro Ala Ile Pro Ser  
580 585 590  
Gln Arg Arg His Ser Thr Ala Ala Glu Glu Ser Glu His Ser Ala Asn  
595 600 605  
Pro Thr Ser Asp Glu Asn

610

&lt;210&gt; 2620

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2620

Met Arg Tyr His Leu Thr Pro Val Arg Met Ala Ile Ile Lys Lys Ser

1 5 10 15

Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu Leu

20 25 30

His Cys Trp Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser Val

35 40 45

Trp Arg Phe Leu Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp Pro Ala

50 55 60

Ile Pro Leu Leu Gly Ile Tyr Pro Asn Glu Tyr Lys Ser Cys Cys Tyr

65 70 75 80

Lys Asp Thr Cys Thr Arg Met Phe Ile Val Ala Leu Phe Thr Ile Ala

85 90 95

Lys Thr Trp Asn Gln Pro Arg Cys Pro Ser Val Val Asp Leu Ile Lys

100 105 110

Lys Ile Trp Tyr Ile Tyr Ile Met Gly Tyr Tyr Thr Ala Ile

115 120 125

&lt;210&gt; 2621

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2621

Met Leu Trp Tyr Gly Leu Leu Gly Tyr Leu Arg Leu Pro Cys Lys Gln

1 5 10 15

Leu Trp Pro Asp Trp Ile Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys

20 25 30

Ser Val Gly Ser Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu Ile

35 40 45

Arg Ser Asn Ser Ser Pro Arg Ala Lys Val Ser Tyr Gly Arg Lys Leu

50 55 60

Ser Leu Trp Lys Trp Pro Ser Met Ala Thr Leu Tyr Tyr Arg Cys Ser

65 70 75 80

Cys Thr Lys Pro Ser Gly Tyr His Met Ser Trp Val Ala Ala Pro Pro

85 90 95

Leu Cys Leu Ser Ser Gly Cys Cys Ile Ser Glu Thr Cys Arg Pro Ala

100 105 110

Ile Thr Gln Cys Ser Pro Thr Arg Met Glu Asp Leu Cys Phe Trp Pro

115 120 125

Asn

&lt;210&gt; 2622

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2622

Met Lys Ile Pro Ile Val Gly Gln His Pro Glu Ala Glu Ala Trp Ala  
 1 5 10 15  
 Val Cys Phe Gln Glu Glu Glu Gln Glu Trp Pro Gln Pro Cys Thr Pro  
 20 25 30  
 Arg Cys Thr Pro Gly Ala Ala Trp Pro Gln Leu Trp Ser Ala Gly Leu  
 35 40 45  
 Leu Pro Gly Ala Pro Pro Pro Val Leu Gly Cys Gly Cys Gly Cys Leu  
 50 55 60  
 Trp Phe Val Phe Leu Gly Asn Leu Gly Gln Val Gly Val Arg Ala Gly  
 65 70 75 80  
 Leu Ala Leu Asp Ile Cys Thr Ser His Ser Ser Leu Trp Ala Arg Ala  
 85 90 95  
 His Pro Leu Trp Ala Gly Asp Gln Gly Asp Gln Val Pro Arg Val Pro  
 100 105 110  
 Ser Ser Ala Pro Gly Ala Phe Trp Val  
 115 120

&lt;210&gt; 2623

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2623

Met Val Trp Asp Val Gly Thr Gly Ala Ala Met Leu Thr Leu Gly Pro  
 1 5 10 15  
 Glu Val His Pro Asp Thr Ile Tyr Ser Val Asp Trp Ser Arg Asp Gly  
 20 25 30

Gly Leu Ile Cys Thr Ser Cys Arg Asp Lys Arg Val Arg Ile Ile Glu  
35 40 45  
Pro Arg Lys Gly Thr Val Val Ala Glu Lys Asp Arg Pro His Glu Gly  
50 55 60  
Thr Arg Pro Val Arg Ala Val Phe Val Ser Glu Gly Lys Ile Leu Thr  
65 70 75 80  
Thr Gly Phe Ser Arg Met Ser Glu Arg Gln Val Ala Leu Trp Asp Thr  
85 90 95  
Val Ser Ala Gly Ala Gly Ser Arg Gly Pro Pro Gly Trp Glu Pro Arg  
100 105 110  
Leu Glu Val Ser Ser Leu Leu Cys His Ser Pro Gly Arg Met Ala Met  
115 120 125  
Gly Leu Ser Leu Pro Arg Arg Glu Met Val Val Pro Thr Gly Trp Ser  
130 135 140  
Gly Gly Pro Ser Gln Val Thr Ala Gln Gly Arg Pro Pro Ser Gln Gly  
145 150 155 160  
Leu Gly Cys Tyr Leu Ser Pro Val Ser Thr Glu Ala Pro Gly Gly Ala  
165 170 175  
Ala Val Pro Ala Gly Ala Gly His Gln Gln Arg Cys Pro Ala Ala Leu  
180 185 190  
Leu

&lt;210&gt; 2624

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2624

Met Leu His Cys Phe Leu Trp Pro Ser Ser Cys Leu Gly Pro Asp Val  
 1 5 10 15  
 His Pro Gly Trp Trp Leu Gln Val Gly His Pro Val Leu Leu Cys Ile  
 20 25 30  
 Ser Ile Gln Ser Pro Ile Ser Thr Gln Asn Ser Ser Val Pro Gln Arg  
 35 40 45  
 Ser Ser Leu Glu Thr Gly Arg Leu Thr Ser Ser Pro Thr Ala Glu Pro  
 50 55 60  
 Pro Glu Ala Thr Trp Gln Asn Ala Ile Gln Asp Cys Thr Trp His Ser  
 65 70 75 80  
 Ala Ala Val Ser Gln Trp Asp Pro Ser Ile Gln Asn Gly Ser Ser Val  
 85 90 95  
 Phe Leu Leu Leu Ser  
 100

&lt;210&gt; 2625

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2625

Met Arg Ser Ala Ala Phe Thr Ile Pro Ser Leu Lys Gln Arg Ser Pro  
 1 5 10 15  
 Arg Cys Ser Thr Gly Arg Ala Glu Leu Gly Lys Gly Glu Pro Ser Pro  
 20 25 30  
 Cys Thr Gly Arg Pro Glu Gln Arg Gly Arg Arg Lys Ser Ser Leu Ala  
 35 40 45

Pro Pro Ala Pro Thr Pro Asp Ala Gly Pro Gln Thr Ser Lys Asp Leu  
 50 55 60  
 Glu Pro Pro Pro His Gly Cys Gln Glu Ala Asp Arg Gly Gly Ser Trp  
 65 70 75 80  
 Gly Ala Thr Thr Ser Arg Pro Phe Arg Gln Asn Leu Ser Asp Leu Gly  
 85 90 95  
 Arg His Ser Val Leu Pro Leu Lys Arg Asn Leu Cys Pro Gly Gly Ser  
 100 105 110  
 Ser Leu Gly Ala Pro Pro Leu Arg Thr Pro Gln Arg Arg Val Thr Leu  
 115 120 125  
 Ala Ala Gln Arg Trp Leu Ser Arg Pro Gln Arg Arg Ala Val Gly Leu  
 130 135 140  
 Gly Glu Leu Asp Gln Gly Ala Gln Leu Ala Ala Leu Gly Leu Arg Trp  
 145 150 155 160  
 Gly Val Asp Ser Leu Gly Gly Cys Pro Arg Ala Ser Gln Pro Ala Gly  
 165 170 175  
 His Ser Gly Leu His His Thr Leu Thr Cys Leu Arg Arg His Leu Ala  
 180 185 190  
 Leu Gln Ala Gly Ala Ser Gly His Ala Gly Gln Leu Pro Gln Arg Ala  
 195 200 205  
 Ser Ala Ala Trp Glu Gln Gln Gly Gln Ser Tyr Thr Ala Leu His Leu  
 210 215 220  
 Ala Ala Met Tyr Leu Gly Asp Gly Glu Ala Ala Ser Gly Asn Ile Gly  
 225 230 235 240  
 Arg Arg Cys

&lt;210&gt; 2626

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2626

Met Leu Gln Asp Pro Arg Ser Gln Leu Arg Gln Phe Ser His Ile Lys

1 5 10 15

Met Asp Ile Thr Leu Thr Lys Pro Asn Phe Ala Lys His Ile Val Trp

20 25 30

Ala Pro Glu Asp Leu Leu Pro Val Pro Leu Pro Lys Pro Asp Pro Val

35 40 45

Ser Ser Ile Asn Leu Pro Leu Pro Pro Leu Ile Ala Asp Gln Arg Leu

50 55 60

Asn Arg Leu Trp Asn Thr Lys Ser Asp Leu His Gln Asn Thr Val Ser

65 70 75 80

Ile Asp Pro Lys Leu Ala Ala Lys Ala Lys Ile Asn Thr Thr Asn Arg

85 90 95

Glu Gly Tyr Leu Glu Gln Phe Gly Asp Ser His Gly Ser Gly Ala Lys

100 105 110

Leu Gly Asp Pro Arg Leu Gln Lys Asn Phe Asp Pro Arg Leu His Arg

115 120 125

Leu Pro Asn Thr Glu Ser His Gln Val Val Met Lys Asp Ser His Ala

130 135 140

Ser Lys Gly Ala Pro His Leu Pro Arg Ser Asn Pro Gly Ser Ser Gln

145 150 155 160

Pro Ser Gly Ala Gly Thr Ser Asn Ser Gly Ser Gly Ala Leu Pro Pro

165 170 175

Tyr Ala Pro Lys Leu Ser Ser Ser Ala Gly Leu Pro Leu Gly Thr Ser

180 185 190

Thr Ser Val Leu Ser Gly Ile Ser Leu Tyr Asp Pro Arg Asp His Gly  
195 200 205  
Ser Ser Ser Thr Ser Glu Leu Ala Thr Ala Ser Ser Gly Glu Asn Ser  
210 215 220  
Lys Asn Gln Lys Lys Ser Gly Gly Leu Lys Ser Ser Asp Lys Thr Glu  
225 230 235 240  
Pro Ser Pro Gly Glu Ala Ile Leu Pro Gln Lys Pro Ser Pro Asn Val  
245 250 255  
Gly Val Thr Leu Glu Gly Pro Ala Asp Pro Gln Ala Asp Val Pro Arg  
260 265 270  
Ser Ser Gly Lys Val Gln Val Pro Ala Val His Ser Leu Pro Val Gln  
275 280 285  
Ala Leu Thr Gly Leu Ile Arg Pro Gln Tyr Ser Asp Pro Arg Gln Ala  
290 295 300  
Arg Gln Pro Gly Gln Gly Ser Pro Thr Pro Asp Asn Asp Pro Gly Arg  
305 310 315 320  
Glu Thr Asp Asp Lys Ser Leu Lys Glu Val Phe Lys Thr Phe Asp Pro  
325 330 335  
Thr Ala Ser Pro Phe Cys  
340

&lt;210&gt; 2627

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2627

Met Met Asn Pro Arg Ala Lys Arg Asp Phe Tyr Leu Ala Ala Pro Asp

1 5 10 15  
Leu Leu Asp Pro Lys Ser Ala Ala Gln Asn Ser Lys Pro Arg Leu Ser  
20 25 30  
Phe Ser Thr Lys Pro Thr Val Leu Ala Ser Arg Val Glu Ser Asp Thr  
35 40 45  
Thr Ile Asn Val Met Lys Trp Lys Thr Val Ser Thr Ile Phe Leu Val  
50 55 60  
Val Val Leu Tyr Leu Ile Ile Gly Ala Thr Val Phe Lys Ala Leu Glu  
65 70 75 80  
Gln Pro His Glu Ile Ser Gln Arg Thr Thr Ile Val Ile Gln Lys Gln  
85 90 95  
Thr Phe Ile Ser Gln His Ser Cys Val Asn Ser Thr Glu Leu Asp Glu  
100 105 110  
Leu Ile Gln Asp Leu Glu Thr Ser His His Ala Gln Lys Ala Ala Lys  
115 120 125  
Tyr Ser Val Ser Ser Met Pro Tyr Trp Glu Phe Pro Ser Leu Val Phe  
130 135 140  
Ser Trp Leu Glu Leu Glu Ile Ser  
145 150

&lt;210&gt; 2628

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2628

Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val Lys Ala  
1 5 10 15

Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp Pro Asp  
                     20                    25                    30  
 Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp Pro Ser  
                     35                    40                    45  
 Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp Pro Asp  
                     50                    55                    60  
 Leu Gly Gly Ala Ile Pro Leu Gly Asp Ser Leu Leu Leu Pro Ala Ala  
                     65                    70                    75                    80  
 Cys Glu Ser Gly Gly Pro Thr Pro Ser Leu Ser His Arg Asp Ala Ser  
                                     85                    90                    95  
 Lys Glu Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
                     100                    105                    110

<210> 2629

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2629

Met Ala Lys Arg Ser Lys Met Leu Ser Leu Asn Asn Tyr Ser Val Pro  
           1                    5                    10                    15  
 Gln Ser Thr Arg Glu Glu Lys Arg Glu Asn Gly Leu Glu Ala Arg Ser  
                     20                    25                    30  
 Pro Ala Ile Asn Leu Met Gly Phe Asn Val Glu Glu Met Cys Glu Ala  
                     35                    40                    45  
 His Ala Trp Ile Gln Arg Ile Leu Ser Leu Gln Asn His His Ile Ile  
                     50                    55                    60  
 Glu Asn Asn His Ile Leu Tyr Leu Gly Arg Lys Glu His Asp Ile Leu

65	70	75	80
Ser Gln Leu Gln Lys Thr Ser Ser Val Ser Ile Thr Glu Ile Ile Ser			
	85	90	95
Pro Gly Arg Thr Glu Leu Glu Ile Glu Gly Ala Arg Ala Asp Leu Ile			
	100	105	110
Glu Val Val Met Asn Ile Glu Asp Met Leu Cys Lys Val Gln Glu Glu			
	115	120	125
Met Ala Arg Lys Lys Glu Arg Gly Leu Trp Arg Ser Leu Gly Gln Trp			
	130	135	140
Thr Ile Gln Gln Gln Lys Thr Gln Asp Glu Met Lys Glu Asn Ile Ile			
145	150	155	160
Phe Leu Lys Cys Pro Val Pro Pro Thr Gln Glu Leu Leu Asp Gln Lys			
	165	170	175
Lys Gln Phe Glu Lys Cys Gly Leu Gln Val Leu Lys Val Tyr Leu Thr			
	180	185	190
Lys Gly Lys Ile Trp Leu Ile Leu Leu Leu Ile Asn Leu Phe Leu			
	195	200	205

&lt;210&gt; 2630

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

Met Ser Asp Pro His Ser Ser Pro Leu Leu Pro Glu Pro Leu Ser Ser			
1	5	10	15
Arg Tyr Lys Leu Tyr Glu Ala Glu Phe Thr Ser Pro Ser Trp Pro Ser			
	20	25	30

Thr Ser Pro Asp Thr His Pro Ala Leu Pro Leu Leu Glu Met Pro Glu  
 35 40 45  
 Glu Lys Asp Leu Arg Ser Ser Asn Glu Asp Ser His Ile Val Lys Ile  
 50 55 60  
 Glu Lys Leu Asn Glu Arg Ser Lys Arg Lys Asp Asp Gly Val Ala His  
 65 70 75 80  
 Arg Asp Ser Ala Gly Gln Arg Cys Ile Cys Leu Ser Lys Ala Val Gly  
 85 90 95  
 Tyr Leu Thr Gly Asp Met Lys Glu Tyr Arg Ile Trp Leu Lys Asp Lys  
 100 105 110  
 His Leu Ala Leu Gln Phe Ile Asp Trp Val Leu Arg Gly Thr Ala Gln  
 115 120 125  
 Val Met Phe Val Asn Asn Pro Leu Ser Gly Leu Ile Ile Phe Ile Gly  
 130 135 140  
 Leu Leu Ile Gln Asn Pro Trp Trp Thr Ile Thr Gly Gly Leu Gly Thr  
 145 150 155 160  
 Val Val Ser Thr Leu Thr Ala Leu Ala Leu Gly Gln Asp Arg Ser Ala  
 165 170 175  
 Ile Ala Ser Gly Leu His Gly Tyr Asn Gly Met Leu Val Gly Leu Leu  
 180 185 190  
 Met Ala Val Phe Ser Glu Lys Leu Asp Tyr Tyr Trp Trp Leu Leu Phe  
 195 200 205  
 Pro Val Thr Phe Thr Ala Met Ser Cys Pro Val Leu Ser Ser Ala Leu  
 210 215 220  
 Asn Ser Ile Phe Ser Lys Trp Asp Leu Pro Val Phe Thr Leu Pro Phe  
 225 230 235 240  
 Asn Ile Ala Val Thr Leu Tyr Leu Ala Ala Thr Gly His Tyr Asn Leu  
 245 250 255  
 Phe Phe Pro Thr Thr Leu Val Glu Pro Val Ser Ser Val Pro Asn Ile



260	265	270
Thr Trp Thr Glu Met Glu Met Pro Leu Leu Leu Gln Ala Ile Pro Val		
275	280	285
Gly Val Gly Gln Val Tyr Gly Cys Asp Asn Pro Trp Thr Gly Gly Val		
290	295	300
Phe Leu Val Ala Leu Phe Ile Ser Ser Pro Leu Ile Cys Leu His Ala		
305	310	315
Ala Ile Gly Ser Ile Val Gly Leu Leu Ala Ala Leu Ser Val Ala Thr		
325	330	335
Pro Phe Glu Thr Ile Tyr Thr Gly Leu Trp Ser Tyr Asn Cys Val Leu		
340	345	350
Ser Cys Ile Ala Ile Gly Gly Met Phe Tyr Ala Leu Thr Trp Gln Thr		
355	360	365
His Leu Leu Ala Leu Ile Cys Ala Leu Phe Cys Ala Tyr Met Glu Ala		
370	375	380
Ala Ile Ser Asn Ile Met Ser Val Val Gly Val Pro Pro Gly Thr Trp		
385	390	395
Ala Phe Cys Leu Ala Thr Ile Ile Phe Leu Leu Leu Thr Thr Asn Asn		
405	410	415
Pro Ala Ile Phe Arg Leu Pro Leu Ser Lys Val Thr Tyr Pro Glu Ala		
420	425	430
Asn Arg Ile Tyr Tyr Leu Thr Val Lys Ser Gly Glu Glu Glu Lys Ala		
435	440	445
Pro Ser Gly Glu		
450		

&lt;210&gt; 2631

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2631

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Met Ser His Cys Ala Gln Pro Lys Thr Val Ile Phe Phe Lys Val Leu
  1             5             10             15
Leu Thr Val Gln Arg Lys Leu Phe Tyr Cys Leu Gln Glu Asn Pro Glu
          20             25             30
Val Trp Phe Ile Arg Pro Val Ser Pro Ser Leu Leu Lys Ile Leu Ala
          35             40             45
Leu Glu Ala Thr Tyr Leu Leu Pro Leu Arg Leu Ala Leu Leu Asp Glu
          50             55             60
Met Met Ser Asp Leu Thr Thr Leu Val Asp Gly Tyr Leu Asn Thr Tyr
          65             70             75             80
Arg Glu Gly Ser Ala Asp Arg Leu Gly Gly Thr Glu Pro Thr Cys Met
          85             90             95
Glu Leu Pro Glu Glu Leu Leu Gln Leu Lys Asp Phe Gln Lys Gln Arg
          100            105            110
Arg Glu Lys Ala Ala Arg Glu Tyr Arg Val Asn Ala Gln Gly Leu Leu
          115            120            125
Ile Arg Thr Val Leu Gln Pro Lys Lys Leu Val Thr Glu Thr Ala Gly
          130            135            140
Lys Glu Glu Lys Val Lys Gly Phe Leu Phe Gly Lys Asn Phe Arg Ile
          145            150            155            160
Asp Lys Ala Pro Ser Phe Thr Ser Gln Asp Phe His Gly Asp Val Asn
          165            170            175
Leu Leu Lys Glu Glu Ser Leu Asn Lys Gln Ala Thr Asn Pro Gln His
          180            185            190
Leu Pro Pro Thr Glu Glu Gly Glu Thr Ser Glu Asp Ser Ser Asn Lys

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出証特 2 0 0 4 - 3 0 5 9 6 6 0

His Ser Arg Glu Glu Glu Glu Glu Gly Val Ser Leu Leu Arg Thr Ala  
50 55 60  
Leu Val Gly Gln Gly Pro Val Pro Leu Phe Leu Gly Ser Leu Phe Cys  
65 70 75 80  
Ala Gly Cys Arg Gln Gly Pro Ser Val Trp Ser Cys Gly Glu Pro Val  
85 90 95  
Pro Arg Arg Ile Trp Val Thr Ala Ser Val Thr Pro Ser Pro Arg Gln  
100 105 110  
Ala Leu His Pro Cys Ser Asp Ser Leu Asp Ile Leu Lys Ala Leu His  
115 120 125  
Leu Leu Pro Ala Ala Phe Ser Pro Phe Ile Trp Val Gln Val Phe Ala  
130 135 140  
Glu Pro Ser Asn Lys Glu Ser Arg Gly Glu Asn Asp Gly Gly Glu Glu  
145 150 155 160  
Arg Glu Ser Ala Asn Ile Tyr  
165

&lt;210&gt; 2633

&lt;211&gt; 604

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2633

Met Phe Ser Gln Ser Glu Leu Arg Thr Ile Glu Gln Ser Leu Leu Ala  
1 5 10 15  
Thr Arg Val Gly Ser Ile Ala Glu Leu Ser Asp Leu Val Ser Arg Ala  
20 25 30  
Met His His Leu Gln Pro Leu Asn Ala Lys His His Gly Asn Gly Thr

35	40	45
Pro Leu His His Lys Gln Gly Ala Leu Tyr Trp Glu Pro Glu Ala Leu		
50	55	60
Tyr Thr Leu Cys Tyr Phe Met His Cys Pro Gln Met Glu Trp Glu Asn		
65	70	75
Pro Asn Val Glu Pro Ser Lys Val Asn Leu Gln Val Glu Arg Pro Phe		
85	90	95
Leu Val Leu Pro Pro Leu Met Glu Trp Ile Arg Val Ala Val Ala His		
100	105	110
Ala Gly His Arg Arg Ser Phe Ser Met Asp Ser Asp Asp Val Arg Gln		
115	120	125
Ala Ala Arg Leu Leu Leu Pro Gly Val Asp Cys Glu Pro Arg Gln Leu		
130	135	140
Arg Ala Asp Asp Cys Phe Cys Ala Ser Arg Lys Leu Asp Ala Val Ala		
145	150	155
Ile Glu Ala Lys Phe Lys Gln Asp Leu Gly Phe Arg Met Leu Asn Cys		
165	170	175
Gly Arg Thr Asp Leu Val Lys Gln Ala Val Ser Leu Leu Gly Pro Asp		
180	185	190
Gly Ile Asn Thr Met Ser Glu Gln Gly Met Thr Pro Leu Met Tyr Ala		
195	200	205
Cys Val Arg Gly Asp Glu Ala Met Val Gln Met Leu Leu Asp Ala Gly		
210	215	220
Ala Asp Leu Asn Val Glu Val Val Ser Thr Pro His Lys Tyr Pro Ser		
225	230	235
Val His Pro Glu Thr Arg His Trp Thr Ala Leu Thr Phe Ala Val Leu		
245	250	255
His Gly His Ile Pro Val Val Gln Leu Leu Leu Asp Ala Gly Ala Lys		
260	265	270

Val Glu Gly Ser Val Glu His Gly Glu Glu Asn Tyr Ser Glu Thr Pro  
275 280 285

Leu Gln Leu Ala Ala Ala Val Gly Asn Phe Glu Leu Val Ser Leu Leu  
290 295 300

Leu Glu Arg Gly Ala Asp Pro Leu Ile Gly Thr Met Tyr Arg Asn Gly  
305 310 315 320

Ile Ser Thr Thr Pro Gln Gly Asp Met Asn Ser Phe Ser Gln Ala Ala  
325 330 335

Ala His Gly His Arg Asn Val Phe Arg Lys Leu Leu Ala Gln Pro Glu  
340 345 350

Lys Glu Lys Ser Asp Ile Leu Ser Leu Glu Glu Ile Leu Ala Glu Gly  
355 360 365

Thr Asp Leu Ala Glu Thr Ala Pro Pro Pro Leu Cys Ala Ser Arg Asn  
370 375 380

Ser Lys Ala Lys Leu Arg Ala Leu Arg Glu Ala Met Tyr His Ser Ala  
385 390 395 400

Glu His Gly Tyr Val Asp Val Thr Ile Asp Ile Arg Ser Ile Gly Val  
405 410 415

Pro Trp Thr Leu His Thr Trp Leu Glu Ser Leu Arg Ile Ala Phe Gln  
420 425 430

Gln His Arg Arg Pro Leu Ile Gln Cys Leu Leu Lys Glu Phe Lys Thr  
435 440 445

Ile Gln Glu Glu Glu Tyr Thr Glu Glu Leu Val Thr Gln Gly Leu Pro  
450 455 460

Leu Met Phe Glu Ile Leu Lys Ala Ser Lys Asn Glu Val Ile Ser Gln  
465 470 475 480

Gln Leu Cys Val Ile Phe Thr His Cys Tyr Gly Pro Tyr Pro Ile Pro  
485 490 495

Lys Leu Thr Glu Ile Lys Arg Lys Gln Thr Ser Arg Leu Asp Pro His

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Trp His Leu Cys Leu Ser Ser Leu Ser Ala Ser Glu Cys Arg Ala Arg  
 65                      70                      75                      80  
 Gly Leu Asn Ser Gln Ser Arg Thr Arg Ser Leu Asn Val Ser Gln Thr  
                     85                      90                      95  
 Gln Leu Cys Ala Gln Leu His Ser Asn Val Lys Pro Ser Arg Ala Val  
                     100                      105                      110  
 Ser Ala Ser Cys Val Cys Arg Leu Leu Pro Val Leu Gln Gln Val His  
                     115                      120                      125  
 Gln Cys Glu Glu Gly Glu His Leu Gly Asp Tyr His Gly Ala Gly Met  
                     130                      135                      140  
 Leu Arg Ala Leu  
 145

<210> 2635

<211> 150

<212> PRT

<213> Homo sapiens

<400> 2635

Met Cys Leu Leu Cys Pro Phe Pro Ile Gly Lys Ala Ile Ser Val Arg  
 1                      5                      10                      15  
 Leu Gln Tyr Phe Lys His Glu Thr Lys Gln Ser Ile Cys Leu Gly Asn  
                     20                      25                      30  
 Gln Lys Ser Pro Leu Val Cys Pro Phe Phe Gly Glu Gln Gly Leu Asp  
                     35                      40                      45  
 Ser Ser Ser Ser Leu Asp Leu Pro Ser Ser Pro His Pro Ala Pro Thr  
                     50                      55                      60  
 Leu Cys Pro Cys Val Gln Pro Pro Arg Gly Pro Val Ser Val Ser Val



65                      70                      75                      80  
 Pro Val Ser Val Met Gly Ser Arg Leu Ala Pro Leu Leu Ser Ala Cys  
                                  85                      90                      95  
 Leu Phe Val Ser Val Ile Leu Gly Arg Met Val Ile Leu Lys Asn Pro  
                                  100                      105                      110  
 Gly Val Leu Gly Gln Arg Gln Ala Gly Pro Ser Pro Gly Ala Pro Gly  
                                  115                      120                      125  
 Leu Pro Ser Pro Ser Val Arg Ala Pro Leu Gly His Lys Cys Ser Glu  
                                  130                      135                      140  
 Arg Ser Pro Ser Ala Thr  
 145                      150

<210> 2636

<211> 454

<212> PRT

<213> Homo sapiens

<400> 2636

Met Arg Thr Val Pro Gln Phe Thr Thr Phe Ala Ala Thr Arg Phe Lys  
                                  1                      5                      10                      15  
 Pro Ser Ser Thr Ser Ser Thr Arg Thr Ser Ser Pro Cys Ser Pro Val  
                                  20                      25                      30  
 Ser Ala Lys Glu Gly Pro Thr Leu Ser Val Pro Met Val Gln Gly Glu  
                                  35                      40                      45  
 Cys Leu Leu Lys Tyr Gln Leu Arg Pro Arg Arg Glu Trp Gln Arg Asp  
                                  50                      55                      60  
 Ala Ile Ile Thr Cys Asn Pro Glu Glu Phe Ile Val Glu Ala Leu Gln  
                                  65                      70                      75                      80

Leu Pro Asn Phe Gln Gln Ser Val Gln Glu Tyr Arg Arg Ser Ala Gln  
                     85                    90                    95  
 Asp Gly Pro Ala Pro Ala Glu Lys Arg Ser Gln Tyr Pro Glu Ile Ile  
                     100                    105                    110  
 Phe Leu Gly Thr Gly Ser Ala Ile Pro Met Lys Ile Arg Asn Val Ser  
                     115                    120                    125  
 Ala Thr Leu Val Asn Ile Ser Pro Asp Thr Ser Leu Leu Leu Asp Cys  
                     130                    135                    140  
 Gly Glu Gly Thr Phe Gly Gln Leu Cys Arg His Tyr Gly Asp Gln Val  
 145                    150                    155                    160  
 Asp Arg Val Leu Gly Thr Leu Ala Ala Val Phe Val Ser His Leu His  
                     165                    170                    175  
 Ala Asp His His Thr Gly Leu Pro Ser Ile Leu Leu Gln Arg Glu Arg  
                     180                    185                    190  
 Ala Leu Ala Ser Leu Gly Lys Pro Leu His Pro Leu Leu Val Val Ala  
                     195                    200                    205  
 Pro Asn Gln Leu Lys Ala Trp Leu Gln Gln Tyr His Asn Gln Cys Gln  
                     210                    215                    220  
 Glu Val Leu His His Ile Ser Met Ile Pro Ala Lys Cys Leu Gln Glu  
 225                    230                    235                    240  
 Gly Ala Glu Ile Ser Ser Pro Ala Val Glu Arg Leu Ile Ser Ser Leu  
                     245                    250                    255  
 Leu Arg Thr Cys Asp Leu Glu Glu Phe Gln Thr Cys Leu Val Arg His  
                     260                    265                    270  
 Cys Lys His Ala Phe Gly Cys Ala Leu Val His Thr Ser Gly Trp Lys  
                     275                    280                    285  
 Val Val Tyr Ser Gly Asp Thr Met Pro Cys Glu Ala Leu Val Arg Met  
                     290                    295                    300  
 Gly Lys Asp Ala Thr Leu Leu Ile His Glu Ala Thr Leu Glu Asp Gly

305                      310                      315                      320  
 Leu Glu Glu Glu Ala Val Glu Lys Thr His Ser Thr Thr Ser Gln Ala  
                          325                      330                      335  
 Ile Ser Val Gly Met Arg Met Asn Ala Glu Phe Ile Met Leu Asn His  
                          340                      345                      350  
 Phe Ser Gln Arg Tyr Ala Lys Val Pro Leu Phe Ser Pro Asn Phe Ser  
                          355                      360                      365  
 Glu Lys Val Gly Val Ala Phe Asp His Met Lys Val Cys Phe Gly Asp  
                          370                      375                      380  
 Phe Pro Thr Met Pro Lys Leu Ile Pro Pro Leu Lys Ala Leu Phe Ala  
 385                      390                      395                      400  
 Gly Asp Ile Glu Glu Met Glu Glu Arg Arg Glu Lys Arg Glu Leu Arg  
                          405                      410                      415  
 Gln Val Arg Ala Ala Leu Leu Ser Arg Glu Leu Ala Gly Gly Leu Glu  
                          420                      425                      430  
 Asp Gly Glu Pro Gln Gln Lys Arg Ala His Thr Glu Glu Pro Gln Ala  
                          435                      440                      445  
 Lys Lys Val Arg Ala Gln  
                          450

&lt;210&gt; 2637

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2637

Met Gly Asn Pro Ser Val Pro Arg Gly Gly Phe Thr Gln Tyr Cys Arg  
 1                      5                      10                      15

Gly Leu Leu Pro Trp Gly Phe Gln Asp Ala Pro Phe Tyr Leu Leu Val  
                   20                                  25                                  30  
 Leu Gly Phe Asp Lys Leu Pro Leu Trp Gly Thr Ile Leu Ile Ser Val  
                   35                                  40                                  45  
 Gly Cys Ala Val Phe Cys Ala Leu Ile Val Trp Phe Phe Val Cys Pro  
                   50                                  55                                  60  
 Arg Met Lys Arg Lys Ile Glu Arg Glu Ile Lys Cys Ser Pro Ser Glu  
                   65                                  70                                  75                                  80  
 Ser Pro Leu Met Glu Lys Lys Asn Ser Leu Lys Glu Asp His Glu Glu  
                                   85                                  90                                  95  
 Thr Lys Leu Ser Val Gly Asp Ile Glu Asn Lys His Pro Val Ser Glu  
                   100                                  105                                  110  
 Val Gly Pro Ala Thr Val Pro Leu Gln Ala Val Val Glu Glu Arg Thr  
                   115                                  120                                  125  
 Val Ser Phe Lys Leu Gly Asp Leu Glu Glu Ala Pro Glu Arg Glu Arg  
                   130                                  135                                  140  
 Leu Pro Ser Val Asp Leu Lys Glu Glu Thr Ser Ile Asp Ser Thr Val  
                   145                                  150                                  155                                  160  
 Asn Gly Ala Val Gln Leu Pro Asn Gly Asn Leu Val Gln Phe Ser Gln  
                                   165                                  170                                  175  
 Ala Val Ser Asn Gln Ile Asn Ser Ser Gly His Tyr Gln Tyr His Thr  
                   180                                  185                                  190  
 Val His Lys Asp Ser Gly Leu Tyr Lys Glu Leu Leu His Lys Leu His  
                   195                                  200                                  205  
 Leu Ala Lys Val Gly Asp Cys Met Gly Asp Ser Gly Asp Lys Pro Leu  
                   210                                  215                                  220  
 Arg Arg Asn Asn Ser Tyr Thr Ser Tyr Thr Met Ala Ile Cys Gly Met  
                   225                                  230                                  235                                  240  
 Pro Leu Asp Ser Phe Arg Ala Lys Glu Gly Glu Gln Lys Gly Glu Glu

	245		250		255
Met	Glu	Lys	Leu	Thr	Trp
Pro	Asn	Ala	Asp	Ser	Lys
Lys	Arg	Ile	Arg		
	260		265		270
Met	Asp	Ser	Tyr	Thr	Ser
Tyr	Cys	Asn	Ala	Val	Ser
Asp	Leu	His	Ser		
	275		280		285
Ala	Ser	Glu	Ile	Asp	Met
Ser	Val	Lys	Ala	Glu	Met
Gly	Leu	Gly	Asp		
	290		295		300
Arg	Lys	Gly	Ser	Asn	Gly
Ser	Leu	Glu	Glu	Trp	Tyr
Asp	Gln	Asp	Lys		
	305		310		315
Pro	Glu	Val	Ser	Leu	Leu
Phe	Gln	Phe	Leu	Gln	Ile
Leu	Thr	Ala	Cys		
	325		330		335
Phe	Gly	Ser	Phe	Ala	His
Gly	Gly	Asn	Asp	Val	Ser
Asn	Ala	Ile	Gly		
	340		345		350
Pro	Leu	Val	Ala	Leu	Tyr
Leu	Val	Tyr	Asp	Thr	Gly
Asp	Val	Ser	Ser		
	355		360		365
Lys	Val	Ala	Thr	Pro	Ile
Trp	Leu	Leu	Cys		
	370		375		

&lt;210&gt; 2638

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2638

Met	Glu	Thr	Ile	Leu	Ala	Ser	Phe	Cys	Ile	Phe	Ser	Gly	Asp	Gly	Ser
1				5					10					15	
Ser	Pro	Cys	Trp	Pro	Gly	Cys	Ser	Gln	Thr	Pro	Asp	Leu	Lys	Ser	Ala
				20					25					30	

Cys Leu Arg Leu Pro Arg Cys Trp Asp Tyr Arg His Glu Pro Gly Leu  
                   35                                  40                                  45  
 Asp Asp Leu Phe Asn Val Leu Leu Asn Leu Val Cys Trp Ser Cys Phe  
                   50                                  55                                  60  
 Val Thr Gln Ala Gly Val Gln Trp His Asn Leu Gly Leu Leu Gln Ala  
                   65                                  70                                  75                                  80  
 Leu Asn Ser Trp Ala Gln Val Ile Leu Leu Ser Gln Ser Phe Lys Val  
                                   85                                  90                                  95  
 Leu Val Leu Gln Val  
                                   100

<210> 2639

<211> 383

<212> PRT

<213> Homo sapiens

<400> 2639

Met Val Ser Ser Gly Cys Arg Met Arg Ser Leu Trp Phe Ile Ile Val  
           1                                  5                                  10                                  15  
 Ile Ser Phe Leu Pro Asn Thr Glu Gly Phe Ser Arg Ala Ala Leu Pro  
                                   20                                  25                                  30  
 Phe Gly Leu Val Arg Arg Glu Leu Ser Cys Glu Gly Tyr Ser Ile Asp  
                                   35                                  40                                  45  
 Leu Arg Cys Pro Gly Ser Asp Val Ile Met Ile Glu Ser Ala Asn Tyr  
                   50                                  55                                  60  
 Gly Arg Thr Asp Asp Lys Ile Cys Asp Ala Asp Pro Phe Gln Met Glu  
           65                                  70                                  75                                  80  
 Asn Thr Asp Cys Tyr Leu Pro Asp Ala Phe Lys Ile Met Thr Gln Arg

	85		90		95
Cys Asn Asn Arg Thr Gln Cys Ile Val Val Thr Gly Ser Asp Val Phe					
100		105		110	
Pro Asp Pro Cys Pro Gly Thr Tyr Lys Tyr Leu Glu Val Gln Tyr Glu					
115		120		125	
Cys Val Pro Tyr Arg His Ser Leu Asn Asn Ala Arg Asp Thr Ser Ala					
130		135		140	
Met Asp Thr Leu Pro Leu Asn Gly Asn Phe Asn Asn Ser Tyr Ser Leu					
145		150		155	160
His Lys Gly Asp Tyr Asn Asp Ser Val Gln Val Val Asp Cys Gly Leu					
165		170		175	
Ser Leu Asn Asp Thr Ala Phe Glu Lys Met Ile Ile Ser Glu Leu Val					
180		185		190	
His Asn Asn Leu Arg Gly Ser Ser Lys Thr His Asn Leu Glu Leu Thr					
195		200		205	
Leu Pro Val Lys Pro Val Ile Gly Gly Ser Ser Ser Glu Asp Asp Ala					
210		215		220	
Ile Val Ala Asp Ala Ser Ser Leu Met His Ser Asp Asn Pro Gly Leu					
225		230		235	240
Glu Leu His His Lys Glu Leu Glu Ala Pro Leu Ile Pro Gln Arg Thr					
245		250		255	
His Ser Leu Leu Tyr Gln Pro Gln Lys Lys Val Lys Ser Glu Gly Thr					
260		265		270	
Asp Ser Tyr Val Ser Gln Leu Thr Ala Glu Ala Glu Asp His Leu Gln					
275		280		285	
Ser Pro Asn Arg Asp Ser Leu Tyr Thr Ser Met Pro Asn Leu Arg Asp					
290		295		300	
Ser Pro Tyr Pro Glu Ser Ser Pro Asp Met Glu Glu Asp Leu Ser Pro					
305		310		315	320

Ser Arg Arg Ser Glu Asn Glu Asp Ile Tyr Tyr Lys Ser Met Pro Asn  
325 330 335  
Leu Gly Ala Gly His Gln Leu Gln Met Cys Tyr Gln Ile Ser Arg Gly  
340 345 350  
Asn Ser Asp Gly Tyr Ile Ile Pro Ile Asn Lys Glu Gly Cys Ile Pro  
355 360 365  
Glu Gly Asp Val Arg Glu Gly Gln Met Gln Leu Val Thr Ser Leu  
370 375 380

&lt;210&gt; 2640

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2640

Met Glu Tyr Glu Ser Gln Lys Glu Lys Glu Val Ser Val Ser Asp Val  
1 5 10 15  
Asn Ser Ile Thr Ala Gln Arg Ile Asn Ser Ala Asn Phe Leu Lys Lys  
20 25 30  
Val Arg Arg Leu Ile Met Lys Arg Ile Val Lys Ile Ser Lys Cys Asn  
35 40 45  
Leu Ser Asp Ile Val Asn Asp Tyr Glu Glu Ile Val Ser Thr Ser Gln  
50 55 60  
Leu Thr Asp Ala Val Cys Lys Phe Val Glu Pro Arg Arg Lys Leu Lys  
65 70 75 80  
Pro Gln Arg Lys Glu Arg Lys Lys Val Thr Ala Gln Ala Ile Ser Asp  
85 90 95  
Gly Asp Ile Lys Ile Leu Val Arg Ile Val Arg Ala Tyr Asn Ile Pro



100	105	110
Thr Arg Lys Thr Thr Ile Asn Gly Phe Cys Cys Gln Leu Pro Tyr Ser		
115	120	125
Met Pro Leu Thr Leu Ser Val Leu Glu Ala Glu Arg Trp Arg Lys Cys		
130	135	140
Pro Arg Lys Ala Ala Lys Gln Met Trp Asn Asp Pro Trp Ile Cys Leu		
145	150	155
160		
Leu Val		

&lt;210&gt; 2641

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2641

Met Glu Met Leu Pro Leu His Arg Tyr Ser His Cys Thr Asp Thr Pro			
1	5	10	15
Thr Ala Gln Arg Gly Ala His His Met Gly Met Leu Pro Leu His Arg			
20	25	30	
Tyr Ser His Cys Thr Asp Thr Pro Thr Ala Gln Arg Gly Thr His Asp			
35	40	45	
Met Gly Met Leu Pro Leu His Arg Cys Ser His Gly Thr Glu Arg His			
50	55	60	
Pro Ser Tyr Gly Asp Val Pro Thr Ala Gln Ile Leu Pro Leu His Arg			
65	70	75	80
Tyr Ser His Arg Thr Glu Arg His Pro Ser Tyr Gly Asp Ala Pro Thr			
85	90	95	

Ala Gln Met Leu Pro Arg His Arg Glu Ala Pro Ile Ile Trp Gly Cys  
100 105 110  
Ser His Cys Thr Asp Thr Pro Ile Ala Gln Ile Leu Pro Pro His Arg  
115 120 125  
Glu Ala Pro Ile Ile Trp Gly Cys Ser His Cys Thr Asp Ala Pro Thr  
130 135 140  
Ala Gln Arg Gly Thr His His Met Gly Met Ile Pro Leu His Arg Tyr  
145 150 155 160  
Ser His Cys Thr Asp Ala Pro Thr Thr Gln Arg Gly Ala His His Met  
165 170 175  
Gly Met Leu Pro Leu His Arg Tyr Ser His Cys Thr Asp Ala Pro Thr  
180 185 190  
Ala Gln Arg Gly Thr His Asp Met Gly Met Leu Pro Leu His Arg Cys  
195 200 205  
Ser His His Thr Glu Arg Arg Pro Ser Tyr Gly Asp Asp Pro Thr Ala  
210 215 220  
Gln Met Leu Pro Leu His Arg  
225 230

&lt;210&gt; 2642

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2642

Met Ser Ser Asp Phe Gln Gly Thr Gly Ala Leu Ser Gly Met Ala Lys  
1 5 10 15  
Glu Asp Thr Ser Ile Gln Leu Gly Ala Thr Pro Gly Ser Gln Thr Leu

20 25 30  
 His Cys Leu Val Pro Arg Ser Ser Ser Arg Ser Glu Val Asp Cys Ser  
 35 40 45  
 Leu Ile His Ser Pro Ser Leu Arg Ala Gly Arg Trp Asp Trp Gln His  
 50 55 60  
 Ser Lys Asp Ile Ala Pro Trp Gly Pro Pro Cys Cys Ile Phe Gln Leu  
 65 70 75 80  
 Arg Gln Val Tyr Ser Pro Pro Ala Ser Val Arg Arg Gly Pro Glu Gln  
 85 90 95  
 Gln Ala Trp Gln His Pro Leu Leu Leu Pro Glu Glu Val Leu Ser Ser  
 100 105 110  
 Pro Gly Cys Gly His Thr Val Arg Leu Tyr Arg Pro Val Trp Ser Ser  
 115 120 125  
 Cys Arg Gly Tyr Asp Leu Asp Lys Thr Glu Gln Thr Gln Glu Ala Leu  
 130 135 140  
 Gln Cys Arg Ala Tyr Ser Ser Ser Ser Trp  
 145 150

&lt;210&gt; 2643

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2643

Met Val Ser His Pro Ser Leu Ser Met Cys Leu Ser His Tyr Leu Ser  
 1 5 10 15  
 Pro Ser Leu Thr Gly Cys Val Ser Pro Tyr Pro Leu Leu Asn Ser Ser  
 20 25 30

Leu Cys His Leu Ser Ser Tyr Thr Leu Leu His Ser Pro Pro Pro Gly  
35 40 45  
Leu Pro Asp Ser Val Pro His Thr Ser Pro Pro Pro Tyr Asn Ala Pro  
50 55 60  
Gln Pro Pro Ala Glu Pro Pro Ala Pro Pro Pro Gln Ala Ala Pro Ser  
65 70 75 80  
Ser His His His His His His His Tyr His Gln Ser Gly Thr Ala Thr  
85 90 95  
Leu Pro Arg Leu Gly Ala Gly Gly Leu Ala Ser Ser Ala Ala Thr Ala  
100 105 110  
Gln Arg Gly Pro Ser Ser Ser Ala Thr Leu Pro Arg Pro Pro His His  
115 120 125  
Ala Pro Pro Gly Pro Ala Ala Gly Ala Pro Pro Pro Gly Cys Ala Thr  
130 135 140  
Leu Pro Arg Met Pro Pro Asp Pro Tyr Leu Gln Glu Thr Arg Phe Glu  
145 150 155 160  
Gly Pro Leu Pro Pro Pro Pro Pro Ala Ala Ala Ala Pro Pro Pro Pro  
165 170 175  
Ala Pro Ala Gln Thr Ala Gln Ala Pro Gly Phe Val Val Pro Thr His  
180 185 190  
Ala Gly Thr Val Gly Thr Leu Pro Leu Gly Gly Tyr Val Ala Pro Gly  
195 200 205  
Tyr Pro Leu Gln Leu Gln Pro Cys Thr Ala Tyr Val Pro Val Tyr Pro  
210 215 220  
Val Gly Thr Pro Tyr Ala Gly Gly Thr Pro Gly Gly Thr Gly Val Thr  
225 230 235 240  
Ser Thr Leu Pro Pro Pro Pro Gln Gly Pro Gly Leu Ala Leu Leu Glu  
245 250 255  
Pro Arg Arg Pro Pro His Asp Tyr Met Pro Ile Ala Val Leu Thr Thr

260 265 270  
 Ile Cys Cys Phe Trp Pro Thr Gly Ile Ile Ala Ile Phe Lys Ala Val  
 275 280 285  
 Gln Val Arg Thr Ala Leu Ala Arg Gly Asp Met Val Ser Ala Glu Ile  
 290 295 300  
 Ala Ser Arg Glu Ala Arg Asn Phe Ser Phe Ile Ser Leu Ala Val Gly  
 305 310 315 320  
 Ile Ala Ala Met Val Leu Cys Thr Ile Leu Thr Val Val Ile Ile Ile  
 325 330 335  
 Ala Ala Gln His His Glu Asn Tyr Trp Asp Pro  
 340 345

<210> 2644

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2644

Met Arg Pro Pro Leu Ser Leu Ser Ser Ala Gly Ser Ala Thr His Leu  
 1 5 10 15  
 Pro Thr Cys Leu Ile Leu Pro Gly Glu Glu Leu Ile Tyr Leu Asp Pro  
 20 25 30  
 His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp Gly Cys Phe Ile Pro  
 35 40 45  
 Asp Glu Ser Phe His Cys Gln His Pro Pro Cys Arg Met Ser Ile Ala  
 50 55 60  
 Glu Leu Asp Pro Ser Ile Ala Val Gly Phe Phe Cys Lys Thr Glu Asp  
 65 70 75 80

Asp Phe Asn Asp Trp Cys Gln Gln Val Lys Lys Leu Ser Leu Leu Gly  
                     85                    90                    95  
 Gly Ala Leu Pro Met Phe Glu Leu Val Glu Leu Gln Pro Ser His Leu  
                     100                    105                    110  
 Ala Cys Pro Asp Val Leu Asn Leu Ser Leu Asp Ser Ser Asp Val Glu  
                     115                    120                    125  
 Arg Leu Glu Arg Phe Phe Asp Ser Glu Asp Glu Asp Phe Glu Ile Leu  
                     130                    135                    140  
 Ser Leu  
 145

<210> 2645

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2645

Met Ala Met Ala Arg Gly Ser Ile Glu Leu Gly Val Glu Thr Cys Gly  
           1                    5                    10                    15  
 Gly His Ser Ser Ser Lys Ala Glu Leu Thr Gln Ala Val Pro Ala Pro  
                     20                    25                    30  
 Ala Arg Pro Arg Pro Leu Ser Pro Gly Leu Pro Thr Gly Gln His Pro  
                     35                    40                    45  
 Ser Ser Cys Val Pro Pro Pro Thr Ser Leu Ala His Leu Ser Val Val  
                     50                    55                    60  
 Pro Gln Glu Gly Pro Gln Cys Gly Trp Arg Val Pro Ser Ala Gly Arg  
                     65                    70                    75                    80  
 Gly Gly Gln Cys Arg His Gln Ala Ser Trp Gly Glu Arg Gly Pro Trp

	85		90		95
Val Gly Gly Pro Leu Ala Ala Pro Pro Ser Leu Thr Glu Ala Arg Arg					
	100		105		110
Gly Ser Arg Trp Arg Thr Cys Thr Trp Tyr Pro Ser Gln Arg Asp Gly					
	115		120		125
Leu Leu Ser Gly Gly Ala Glu Gly Phe Ser Arg Ala Gly Ser Cys Gly					
	130		135		140
Val Trp Gly Ser Arg Trp Pro Pro His Pro Lys Thr Thr Leu Gln Gly					
	145		150		155
					160
Gln Arg Cys Gln Cys Leu Ala Ile Leu Gln Leu Arg Val Ala Glu Leu					
	165		170		175
Gly Gly Gly Arg Thr Ser Trp Gly Glu Gly Arg Val Ser Thr Glu His					
	180		185		190
Pro Gln Arg Gly Pro Arg					
	195				

&lt;210&gt; 2646

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2646

Met Lys Ala Met Pro Trp Asn Trp Thr Cys Leu Leu Ser His Leu Leu				
1	5	10	15	
Met Val Gly Met Gly Ser Ser Thr Leu Leu Thr Arg Gln Pro Ala Pro				
	20	25	30	
Leu Ser Gln Lys Gln Arg Ser Phe Val Thr Phe Arg Gly Glu Pro Ala				
	35	40	45	

Glu Gly Phe Asn His Leu Val Val Asp Glu Arg Thr Gly His Ile Tyr  
50 55 60  
Leu Gly Ala Val Asn Arg Ile Tyr Lys Leu Ser Ser Asp Leu Lys Val  
65 70 75 80  
Leu Val Thr His Glu Thr Gly Pro Asp Glu Asp Asn Pro Lys Cys Tyr  
85 90 95  
Pro Pro Arg Ile Val Gln Thr Cys Asn Glu Pro Leu Thr Thr Thr Asn  
100 105 110  
Asn Val Asn Lys Met Leu Leu Ile Asp Tyr Lys Glu Asn Arg Leu Ile  
115 120 125  
Ala Cys Gly Ser Leu Tyr Gln Gly Ile Cys Lys Leu Leu Arg Leu Glu  
130 135 140  
Asp Leu Phe Lys Leu Gly Glu Pro Tyr His Lys Lys Glu His Tyr Leu  
145 150 155 160  
Ser Gly Val Asn Glu Ser Gly Ser Val Phe Gly Val Ile Val Ser Tyr  
165 170 175  
Ser Asn Leu Asp Asp Lys Leu Phe Ile Ala Thr Ala Val Asp Gly Lys  
180 185 190  
Pro Glu Tyr Phe Pro Thr Ile Ser Ser Arg Lys Leu Thr Lys Asn Ser  
195 200 205  
Glu Ala Asp Gly Met Phe Ala Tyr Val Phe His Asp Glu Phe Val Ala  
210 215 220  
Ser Met Ile Lys Ile Pro Ser Asp Thr Phe Thr Ile Ile Pro Asp Phe  
225 230 235 240  
Asp Ile Tyr Tyr Val Tyr Gly Phe Ser Ser Gly Asn Phe Val Tyr Phe  
245 250 255  
Leu Thr Leu Gln Pro Glu Met Val Ser Pro Pro Gly Ser Thr Thr Lys  
260 265 270  
Glu Gln Val Tyr Thr Ser Lys Leu Val Arg Leu Cys Lys Glu Asp Thr



275	280	285
Ala Phe Asn Ser Tyr Val Glu Val Pro Ile Gly Cys Glu Arg Ser Gly		
290	295	300
Val Glu Tyr Arg Leu Leu Gln Ala Ala Tyr Leu Ser Lys Ala Gly Ala		
305	310	315
Val Leu Gly Arg Thr Leu Gly Val His Pro Asp Asp Asp Leu Leu Phe		
325	330	335
Thr Val Phe Ser Lys Gly Gln Lys Arg Lys Met Lys Ser Leu Asp Glu		
340	345	350
Ser Ala Leu Cys Ile Phe Ile Leu Lys Gln Ile Asn Asp Arg Ile Lys		
355	360	365
Glu Arg Leu Gln Ser Cys Tyr Arg Gly Glu Gly Thr Leu Asp Leu Ala		
370	375	380
Trp Leu Lys Val Lys Asp Ile Pro Cys Ser Ser Ala Leu Leu Thr Ile		
385	390	395
Asp Asp Asn Phe Cys Gly Leu Asp Met Asn Ala Pro Leu Gly Val Ser		
405	410	415
Asp Met Val Arg Gly Ile Pro Val Phe Thr Glu Asp Arg Asp Arg Met		
420	425	430
Thr Ser Val Ile Ala Tyr Val Tyr Lys Asn His Ser Leu Ala Phe Val		
435	440	445
Gly Thr Lys Ser Gly Lys Leu Lys Lys Val Pro Gly Thr Ser Leu Cys		
450	455	460
Pro Thr Leu Glu Leu Gln Thr Gly Pro Arg Ser His Arg Ala Thr Val		
465	470	475
Thr Leu Glu Leu Leu Phe Ser Ser Cys Ser Ser Asn		
485	490	

&lt;210&gt; 2647

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2647

Met Val His Pro Asn Val Pro Ala Ser Leu Phe Gly Phe Arg Ser Glu

1 5 10 15

Asn Asp Leu Ser Leu Ser Arg Tyr Thr Ile Val Arg Asn Ala Leu Pro

20 25 30

Asn Ala Ser Leu Leu Ser Asp Gln Arg Ile Pro Arg Leu Gly Ile Gln

35 40 45

Ile Asn Glu Asn Ser His Met Lys Gly Lys Ser Ile Ala Ile Ser Gly

50 55 60

Glu Asp Leu Ser Pro Gly Leu Phe Pro Gly Ile Ala Thr Trp Val Gly

65 70 75 80

Ala His His Ser Gly Ala Gly Val Gly Arg Gln Glu Glu Glu Ala Glu

85 90 95

Ile Leu Pro Ile Lys Ala Asn

100

&lt;210&gt; 2648

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2648

Met His Gln Cys Val Gln Phe Val His Cys Met Asn Thr Gln Gln Arg

1                      5                      10                      15  
 Arg Gln Met Gly Leu Lys Phe Ser Pro Lys Pro Arg Ala Pro Ala Glu  
                     20                      25                      30  
 Ser Ala Gln Lys Gly His Leu Phe Leu Ile Arg Leu Ser Lys Gly Lys  
                     35                      40                      45  
 Leu Phe Phe Leu Ile Leu Thr Arg Asn Gln Ser Cys Lys Asn Leu Gly  
                     50                      55                      60  
 Ser Cys Asn His Phe Lys Ile Asp Phe Ile Phe Cys Phe Leu Glu Thr  
                     65                      70                      75                      80  
 Lys Ala Arg Ser Ile Ala Gln Ala Gly Val Trp Leu Ala Leu Gln Thr  
                     85                      90                      95  
 Ala Met Ile Leu  
                     100

&lt;210&gt; 2649

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2649

Met Asn Ile Phe Asp Arg Lys Ile Asn Phe Asp Ala Leu Leu Lys Phe  
                     1                      5                      10                      15  
 Ser His Ile Thr Pro Ser Thr Gln Gln His Leu Lys Lys Val Tyr Ala  
                     20                      25                      30  
 Ser Phe Ala Leu Cys Met Phe Val Ala Ala Ala Gly Ala Tyr Val His  
                     35                      40                      45  
 Met Val Thr His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu Gly Ser  
                     50                      55                      60

Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His Val Thr  
65 70 75 80  
Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu Thr Gly  
85 90 95  
Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn Pro Ser  
100 105 110  
Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr Cys Phe  
115 120 125  
Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe Leu Gly  
130 135 140  
Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu Leu Ser Ser Leu Gly  
145 150 155 160  
Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln Ala Asn Leu Tyr Val  
165 170 175  
Gly Leu Val Val Met Cys Gly Phe Val Leu Phe Asp Thr Gln Leu Ile  
180 185 190  
Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His Cys Ile  
195 200 205  
Asp Leu Phe Leu Asp Phe Ile Thr Val Phe Arg Lys Leu Met Met Ile  
210 215 220  
Leu Ala Met Asn Glu Lys Asp Lys Lys Lys Glu Lys Lys  
225 230 235

&lt;210&gt; 2650

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2650

Met	Lys	Arg	Met	Asn	Gln	Asn	Phe	Pro	His	Gly	Gly	Ala	Met	Asp	Thr
1				5					10					15	
His	Phe	Ala	Asn	Met	Arg	Ser	Leu	Ile	Gln	Ile	Leu	Asp	Ser	Glu	Leu
			20					25					30		
Phe	Glu	Leu	Met	His	Gln	Asn	Gly	Asp	Tyr	Thr	His	Phe	Tyr	Phe	Cys
			35				40						45		
Tyr	Arg	Trp	Phe	Leu	Leu	Asp	Phe	Lys	Arg	Glu	Leu	Val	Tyr	Asp	Asp
	50					55						60			
Val	Phe	Leu	Val	Trp	Glu	Thr	Ile	Trp	Ala	Ala	Lys	His	Val	Ser	Ser
	65					70				75				80	
Ala	His	Tyr	Val	Leu	Phe	Ile	Ala	Leu	Ala	Leu	Val	Glu	Val	Tyr	Arg
				85					90					95	
Asp	Ile	Ile	Leu	Glu	Asn	Asn	Met	Asp	Phe	Thr	Asp	Ile	Ile	Lys	Phe
			100						105					110	
Phe	Asn	Glu	Met	Ala	Glu	Arg	His	Asn	Thr	Lys	Gln	Val	Leu	Lys	Leu
			115					120						125	
Ala	Arg	Asp	Leu	Val	Tyr	Lys	Val	Gln	Thr	Leu	Ile	Glu	Asn	Lys	
			130					135						140	

&lt;210&gt; 2651

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2651

Met	Glu	Thr	His	Lys	Glu	Leu	Lys	Pro	Leu	Leu	Ser	Pro	Ser	Ser	Glu
1				5					10					15	

Thr Thr Val Thr Val Glu Leu Pro Glu Ala Asp Arg Ala Gly Ala Gly  
                     20                                      25                                      30  
 Thr Gly Ala Gln Ala Gly Gln Leu Met Gly Phe Phe Lys Gly Ile Asp  
                     35                                      40                                      45  
 Gln Asp Ile Glu Arg Ala Val Gln Ser Glu Ile Phe Leu His Glu Ser  
                     50                                      55                                      60  
 Tyr Cys Met Asp Thr Ser His Gln Pro Leu Leu Pro Ala Pro Pro Lys  
                     65                                      70                                      75                                      80  
 Thr Pro Met Asp Gly Ala Asp Cys Gly Ile Gln Trp Trp Asn Ala Val  
                                     85                                      90                                      95  
 Phe Ile Met Leu Leu Ile Gly Ile Val Leu Pro Val Phe Tyr Leu Val  
                     100                                      105                                      110  
 Tyr Phe Lys Ile Gln Ala Ser Gly Glu Thr Pro Asn Ser Leu Asn Thr  
                     115                                      120                                      125  
 Thr Val Ile Pro Asn Gly Ser Met Ala Met Gly Thr Val Pro Gly Gln  
                     130                                      135                                      140  
 Ala Pro Arg Leu Ala Val Ala Val Pro Ala Val Thr Ser Ala Asp Ser  
                     145                                      150                                      155                                      160  
 Gln Phe Ser Gln Thr Thr Gln Ala Gly Ser  
                                     165                                      170

&lt;210&gt; 2652

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2652

Met Ser His Ile Gln Leu Gln Val Val His Gly Pro Gly Ser Leu Trp

1	5	10	15
Gln Glu Gly Ala Ser Arg Ala Val Phe Leu Ser Val Thr Leu Ser Ser			
20	25	30	
Cys Ser Lys His Met Tyr Leu Lys Gln Leu Tyr Thr Lys Leu Ile Lys			
35	40	45	
Ile Lys Asp Gly Gln Pro Val Pro Gly Asn Val Glu Glu Glu Leu Val			
50	55	60	
Ile Glu Phe Pro Trp Trp Asp Lys Arg Ile Thr His Leu Ala Phe Asn			
65	70	75	80
Glu Arg Phe Pro Glu Leu His Pro Phe Pro Ser Leu Thr Ala Gly Ser			
85	90	95	
Cys Arg Pro Cys Gly Ala His Ser Gly Arg Gly Lys Met Arg Pro Glu			
100	105	110	
Ala Arg Arg Tyr Ala Leu Gly Ala Met Arg Thr Gln Pro Ser Gln Val			
115	120	125	
Asn Ala Ala Ser Ala Thr Ala Arg Ala Leu Ile Ile Ile			
130	135	140	

&lt;210&gt; 2653

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2653

Met Leu Gly Lys Gln Gln Gly Glu Glu Asp Val Arg Arg Leu Phe Gln			
1	5	10	15
Pro Phe Gly His Ile Glu Glu Cys Thr Val Leu Arg Ser Pro Asp Gly			
20	25	30	

Thr Ser Lys Gly Cys Ala Phe Val Lys Phe Gly Ser Gln Gly Glu Ala  
 35 40 45  
 Gln Ala Ala Ile Arg Gly Leu His Gly Ser Arg Thr Met Ala Gly Ala  
 50 55 60  
 Ser Ser Ser Leu Val Val Lys Leu Ala Asp Thr Asp Arg Glu Arg Ala  
 65 70 75 80  
 Leu Arg Arg Met Gln Gln Met Ala Gly His Leu Gly Ala Phe His Pro  
 85 90 95  
 Ala Pro Leu Pro Leu Gly Ala Cys Gly Ala Tyr Thr Thr Ala Ile Leu  
 100 105 110  
 Gln His Gln Ala Ala Leu Leu Ala Ala Ala Gln Gly Pro Gly Leu Gly  
 115 120 125  
 Pro Val Ala Ala Val Ala Ala Gln Met Gln His Val Ala Ala Phe Ser  
 130 135 140  
 Leu Val Ala Ala Pro Leu Leu Pro Ala Ala Ala Ala Asn Ser Pro Pro  
 145 150 155 160  
 Gly Ser Gly Pro Gly Thr Leu Pro Gly Leu Pro Ala Pro Ile Gly Val  
 165 170 175  
 Asn Gly Phe Gly Pro Leu Thr Pro Gln Thr Asn Gly Gln Pro Gly Ser  
 180 185 190  
 Asp Thr Leu Tyr Asn Asn Gly Leu Ser Pro Tyr Pro Ala Gln Ser Pro  
 195 200 205  
 Gly Val Ala Asp Pro Leu Gln Gln Ala Tyr Ala Gly Met His His Tyr  
 210 215 220  
 Ala Ala Ala Tyr Pro Ser Ala Tyr Ala Pro Val Ser Thr Ala Phe Pro  
 225 230 235 240  
 Gln Gln Pro Ser Ala Leu Pro Gln Gln Gln Arg Glu Gly Pro Glu Gly  
 245 250 255  
 Cys Asn Leu Phe Ile Tyr His Leu Pro Gln Glu Phe Gly Asp Ala Glu



出証特 2 0 0 4 - 3 0 5 9 6 6 0

Val Tyr Arg Thr Gln Ser Trp Ser Pro Gly Leu Leu Pro Gly Gln Thr  
                             85                            90                            95  
 Pro Ser Thr Pro Gly Ala His Val Ser Val Pro His Ala Ile Asn Asp  
                             100                            105                            110  
 Pro Pro Leu Leu Phe Cys Val Ser Tyr Ser Leu Ser Val  
                             115                            120                            125

<210> 2655

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2655

Met Arg Arg Gln Lys Ala Glu Ala Gly Leu Arg Leu Ile Gln Lys Val  
     1                    5                            10                            15  
 Gly Val Gly Trp Val Arg Gly Met Trp Ser Thr Lys Ala Ser His Pro  
                     20                            25                            30  
 Pro Leu Thr Arg Ala Pro Ser Pro Gln Val Ser Pro Ala His Trp Ile  
                     35                            40                            45  
 Arg Lys Ser Ser Val Arg Pro Glu Ala Pro Gly Thr Gly Phe Ser Gln  
                     50                            55                            60  
 Phe Ser Arg Glu Gly His Leu Gln Val Thr Glu Thr Ser Ser Thr Arg  
     65                    70                            75                            80  
 Glu Asp Leu Thr Phe Glu Ser Leu Pro Gly His Gln Arg Pro Ser Gln  
                     85                            90                            95  
 Pro His Gly Lys Leu Pro Arg Pro Asp Ser Gly Ile Ile Pro Pro Trp  
                     100                            105                            110  
 Leu Arg His Gln Pro Gly Lys Thr

115

120

&lt;210&gt; 2656

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

Met Tyr Glu Ile Ala Ala Pro Asn Val Ala Phe Met Thr Leu Arg Ser

1 5 10 15

Met Cys Asn Thr Ser Lys Met Val Thr Cys Ala Lys Ile Phe Phe Tyr

20 25 30

Phe Leu Val Phe Phe Ser Leu Ser Gln Asn Val Pro Thr Ile Gly Val

35 40 45

Ile Ala Val Val Leu Ala Thr His Leu Cys Asp Glu Val Ser Leu Ala

50 55 60

Gly Phe Gly Tyr Asp Leu Asn Gln Pro Arg Thr Pro Leu His Tyr Phe

65 70 75 80

Asp Ser Gln Cys Met Ala Ala Met Asn Phe Gln Thr Met His Asn Val

85 90 95

Thr Thr Glu Thr Lys Phe Leu Leu Lys Leu Val Lys Glu Gly Val Val

100 105 110

Lys Asp Leu Ser Gly Gly Ile Asp Arg Glu Phe

115 120

&lt;210&gt; 2657

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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Met Trp Leu Trp Val Leu Ala Ala Gln Arg Phe Ser Ser Arg Leu Leu
  1             5             10             15
Pro Gln Ser Glu Ser Ile Ala Thr Leu Thr Ser Pro Val Ala Val Leu
          20             25             30
Ala Thr Leu Arg Ser Gly Leu Pro Met Arg Val Leu Asp Leu Gly Ser
          35             40             45
Gly Asn Leu Glu Glu Val Glu Ile Ala Gly Trp Asp Ser Arg Phe Arg
          50             55             60
Ala Gly Met Arg Gly Arg Glu Asp Ala Ser Leu Glu Ala Glu Trp Arg
          65             70             75             80
Ala Arg Arg Arg Arg Met Val Gln Glu Thr Ala Thr Arg Arg Pro Ala
          85             90             95
Arg Pro Ala Ser Tyr Arg Asp Pro Gly Ser Asn Pro Pro Pro Phe Arg
          100            105            110
Lys Arg Pro Gly Ser Arg Tyr Leu Ala Gly Lys Gly Arg Ser Gly Ala
          115            120            125
Lys Arg Ala Gly His Gly Glu Ala Ala Gly Thr Arg Gly Cys Arg Glu
          130            135            140
Arg Gln Trp His Gly Ala Arg Gly Trp Lys Arg Lys Gln Ala Val Trp
          145            150            155            160
Pro Ser Pro Gly Ala Arg Pro Ile Gly Arg Trp Val Pro Arg Pro Gly
          165            170            175
Ala Ala Arg Gln Val Gln Ala Gln Gly Thr Thr Gln Pro Leu Gln His
          180            185            190
Pro Leu Gly Arg Ser Leu Gln Pro Ser Arg Pro Ser Leu Ser Ala Val

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195                                      200                                      205  
 Ala Lys Thr Glu Ala Val Val Pro Val Thr Gly Val Ala Cys Gly Gly  
 210                                      215                                      220  
 Pro Arg Met Arg Ala Thr Asn Glu Arg Leu Ser Lys Arg Arg Tyr Phe  
 225                                      230                                      235                                      240  
 Ala Ser Ile Leu Val Tyr  
 245

<210> 2658

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2658

Met Glu Lys Ser Trp Met Leu Trp Asn Phe Val Glu Arg Trp Leu Ile  
 1                                      5                                      10                                      15  
 Ala Leu Ala Ser Trp Ser Trp Ala Leu Cys Arg Ile Ser Leu Leu Pro  
 20                                      25                                      30  
 Leu Ile Val Thr Phe His Leu Tyr Gly Gly Ile Ile Leu Leu Leu Leu  
 35                                      40                                      45  
 Ile Phe Ile Ser Ile Ala Gly Ile Leu Tyr Lys Phe Gln Asp Val Leu  
 50                                      55                                      60  
 Leu Tyr Phe Pro Glu Gln Pro Ser Ser Ser Arg Leu Tyr Val Pro Met  
 65                                      70                                      75                                      80  
 Pro Thr Gly Ile Pro His Glu Asn Ile Phe Ile Arg Thr Lys Asp Gly  
 85                                      90                                      95  
 Ile Arg Leu Asn Leu Ile Leu Ile Arg Tyr Thr Gly Asp Asn Ser Pro  
 100                                      105                                      110

Tyr Ser Pro Thr Ile Ile Tyr Phe His Gly Asn Ala Gly Asn Ile Gly  
 115 120 125  
 His Arg Leu Pro Asn Ala Leu Leu Met Leu Val Asn Leu Lys Val Asn  
 130 135 140  
 Leu Leu Leu Val Asp Tyr Arg Gly Tyr Gly Lys Ser Glu Gly Glu Ala  
 145 150 155 160  
 Ser Glu Glu Gly Leu Tyr Leu Asp Ser Glu Ala Val Leu Asp Tyr Val  
 165 170 175  
 Met Thr Arg Pro Asp Leu Asp Lys Thr Lys Ile Phe Leu Phe Gly Arg  
 180 185 190  
 Ser Leu Gly Gly Ala Val Ala Ile His Leu Ala Ser Glu Asn Ser His  
 195 200 205  
 Arg Ile Ser Ala Ile Met Val Glu Asn Thr Phe Leu Ser Ile Pro His  
 210 215 220  
 Met Ala Ser Thr Leu Phe Ser Phe Phe Pro Met Arg Tyr Leu Pro Leu  
 225 230 235 240  
 Trp Cys Tyr Lys Asn Lys Phe Leu Ser Tyr Arg Lys Ile Ser Gln Cys  
 245 250 255  
 Arg Met Pro Ser Leu Phe Ile Ser Gly Leu Ser Asp Gln Leu Ile Pro  
 260 265 270  
 Pro Val Met Met Lys Gln Leu Tyr Glu Leu Ser Pro Ser Arg Thr Lys  
 275 280 285  
 Arg Leu Ala Ile Phe Pro Asp Gly Thr His Asn Asp Thr Trp Gln Cys  
 290 295 300  
 Gln Gly Tyr Phe Thr Ala Leu Glu Gln Phe Ile Lys Glu Val Val Lys  
 305 310 315 320  
 Ser His Ser Pro Glu Glu Met Ala Lys Thr Ser Ser Asn Val Thr Ile  
 325 330 335  
 Ile

&lt;210&gt; 2659

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2659

Met Thr Pro Pro Ser Thr Pro Asn Pro Ala Glu Cys Gly Gly Asp Leu

1 5 10 15

Gly Arg Arg Gln Gly Leu Pro Gly Arg Ser Gly Cys Trp Gly Trp Gly

20 25 30

Thr Gly Pro Ala Gly Glu Ala Gly Arg Gly Arg Thr Gly Asp Pro Gly

35 40 45

Ser Pro Arg Tyr Asn Glu Pro Arg Gly Arg Glu Tyr Ala Ile Pro Val

50 55 60

Pro Thr Ser Glu Asp Val Gly Leu Leu Ala Pro Ala Ala Ala Ala Phe

65 70 75 80

Pro His Ile Trp Ala Gly Pro Arg Ser Met Ala Trp Gly Ala Glu Ala

85 90 95

Ser Gly Ser Gly Thr Asn Tyr His Ser Arg Cys Arg Arg Arg Arg Trp

100 105 110

Gly Val Gly Ser Arg Gly Pro Trp Ser Glu Gln Thr Phe Ser Pro Leu

115 120 125

Gly Leu Pro Pro Pro Gly Ala Gly Leu Thr Gly Lys Asp Pro Arg Gly

130 135 140

Val Gly Cys Pro

145

&lt;210&gt; 2660

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2660

Met Tyr Phe Thr Glu Phe Pro Thr Ala His Val Ser Phe Leu Pro Phe

1 5 10 15

Arg Val Asp Leu Ser Asn Val Leu Asp Leu His Ala Phe Asp Ser Leu

20 25 30

Ser Gly Ile Ser Leu Gln Lys Lys Leu Gln His Val Pro Gly Thr Gln

35 40 45

Pro His Leu Asp Gln Ser Ile Val Thr Ile Thr Phe Glu Val Pro Gly

50 55 60

Asn Ala Lys Glu Glu His Leu Asn Met Phe Ile Gln Asn Leu Leu Trp

65 70 75 80

Glu Lys Asn Val Arg Asn Lys Asp Asn His Cys Met Glu Val Ile Arg

85 90 95

Leu Lys Gly Leu Val Ser Ile Lys Asp Lys Ser Gln Gln Val Ile Val

100 105 110

Gln Gly Val His Glu Leu Tyr Asp Leu Glu Glu Thr Pro Val Ser Trp

115 120 125

Lys Asp Asp Thr Glu Arg Thr Asn Arg Leu Val Leu Leu Gly Arg Asn

130 135 140

Leu Asp Lys Asp Ile Leu Lys Gln Leu Phe Ile Ala Thr Val Thr Glu

145 150 155 160

Thr Glu Lys Gln Trp Thr Thr His Phe Lys Glu Asp Gln Val Cys Thr



165

170

175

&lt;210&gt; 2661

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2661

Met Cys Gly Trp Ala Ala Tyr Leu Met Arg Glu Pro Pro Pro Lys Pro  
 1 5 10 15  
 Glu Pro Ser Ser Leu Cys Gly Gln His Pro Gly Arg Pro Gly Gly Ala  
 20 25 30  
 Ala Ser Pro Ala Pro Thr Pro Ser Ala Trp Cys Trp Pro Val Ala Pro  
 35 40 45  
 Glu Pro Leu Thr Ser Pro Val Arg Gly Leu Gly Pro Ser Pro Gly Pro  
 50 55 60  
 Trp Trp Gln Leu Pro Val Ala Gln Ala Ala Cys Pro Ala Pro Arg Val  
 65 70 75 80  
 Glu Val Glu Leu Arg Gly Leu Leu Leu Gln Gly Ala Glu Gly Gln Arg  
 85 90 95  
 Pro Gly Phe Gly Tyr Gly Gly Arg Ala Ser Asp Tyr Lys Ser Ala His  
 100 105 110  
 Lys Gly Phe Lys Gly Val Asp Ala Gln Gly Thr Leu Ser Lys Ile Phe  
 115 120 125  
 Lys Leu Gly Gly Arg Asp Ser Arg Ser Gly Ser Pro Met Ala Arg Arg  
 130 135 140

&lt;210&gt; 2662

&lt;211&gt; 907

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2662

Met Gln Pro Lys Thr Val Phe Pro Pro Leu Thr Gln Ile Lys Leu Gln

1 5 10 15

Arg Tyr Pro Glu Ser Ala Glu Glu Lys Val Lys Val Glu Pro Leu Asp

20 25 30

Ser Leu Ser Leu Phe His Leu Lys Thr Glu Ser Asn Gly Lys Ala Phe

35 40 45

Thr Asp Lys Ala Tyr Asn Ser Gln Val Gln Leu Thr Val Asn Ala Asn

50 55 60

Gln Lys Ala His Pro Leu Thr Gln Pro Ser Ser Pro Pro Asn Gln Cys

65 70 75 80

Ala Asn Val Met Ala Gly Asp Asp Gln Ile Arg Phe Gln Gln Val Val

85 90 95

Lys Glu Gln Leu Met His Gln Arg Leu Pro Thr Leu Pro Gly Ile Ser

100 105 110

His Glu Thr Pro Leu Pro Glu Ser Ala Leu Thr Leu Arg Asn Val Asn

115 120 125

Val Val Cys Ser Gly Gly Ile Thr Val Val Ser Thr Lys Ser Glu Glu

130 135 140

Glu Val Cys Ser Ser Ser Phe Gly Thr Ser Glu Phe Ser Thr Val Asp

145 150 155 160

Ser Ala Gln Lys Asn Phe Asn Asp Tyr Ala Met Asn Phe Phe Thr Asn

165 170 175

Pro Thr Lys Asn Leu Val Ser Ile Thr Lys Asp Ser Glu Leu Pro Thr

180	185	190
Cys Ser Cys Leu Asp Arg Val Ile Gln Lys Asp Lys Gly Pro Tyr Tyr		
195	200	205
Thr His Leu Gly Ala Gly Pro Ser Val Ala Ala Val Arg Glu Ile Met		
210	215	220
Glu Asn Arg Tyr Gly Gln Lys Gly Asn Ala Ile Arg Ile Glu Ile Val		
225	230	235
Val Tyr Thr Gly Lys Glu Gly Lys Ser Ser His Gly Cys Pro Ile Ala		
245	250	255
Lys Trp Val Leu Arg Arg Ser Ser Asp Glu Glu Lys Val Leu Cys Leu		
260	265	270
Val Arg Gln Arg Thr Gly His His Cys Pro Thr Ala Val Met Val Val		
275	280	285
Leu Ile Met Val Trp Asp Gly Ile Pro Leu Pro Met Ala Asp Arg Leu		
290	295	300
Tyr Thr Glu Leu Thr Glu Asn Leu Lys Ser Tyr Asn Gly His Pro Thr		
305	310	315
Asp Arg Arg Cys Thr Leu Asn Glu Asn Arg Thr Cys Thr Cys Gln Gly		
325	330	335
Ile Asp Pro Glu Thr Cys Gly Ala Ser Phe Ser Phe Gly Cys Ser Trp		
340	345	350
Ser Met Tyr Phe Asn Gly Cys Lys Phe Gly Arg Ser Pro Ser Pro Arg		
355	360	365
Arg Phe Arg Ile Asp Pro Ser Ser Pro Leu His Glu Lys Asn Leu Glu		
370	375	380
Asp Asn Leu Gln Ser Leu Ala Thr Arg Leu Ala Pro Ile Tyr Lys Gln		
385	390	395
Tyr Ala Pro Val Ala Tyr Gln Asn Gln Val Glu Tyr Glu Asn Val Ala		
405	410	415

Arg Glu Cys Arg Leu Gly Ser Lys Glu Gly Arg Pro Phe Ser Gly Val  
420 425 430  
Thr Ala Cys Leu Asp Phe Cys Ala His Pro His Arg Asp Ile His Asn  
435 440 445  
Met Asn Asn Gly Ser Thr Val Val Cys Thr Leu Thr Arg Glu Asp Asn  
450 455 460  
Arg Ser Leu Gly Val Ile Pro Gln Asp Glu Gln Leu His Val Leu Pro  
465 470 475 480  
Leu Tyr Lys Leu Ser Asp Thr Asp Glu Phe Gly Ser Lys Glu Gly Met  
485 490 495  
Glu Ala Lys Ile Lys Ser Gly Ala Ile Glu Val Leu Ala Pro Arg Arg  
500 505 510  
Lys Lys Arg Thr Cys Phe Thr Gln Pro Val Pro Arg Ser Gly Lys Lys  
515 520 525  
Arg Ala Ala Met Met Thr Glu Val Leu Ala His Lys Ile Arg Ala Val  
530 535 540  
Glu Lys Lys Pro Ile Pro Arg Ile Lys Arg Lys Asn Asn Ser Thr Thr  
545 550 555 560  
Thr Asn Asn Ser Lys Pro Ser Ser Leu Pro Thr Leu Gly Ser Asn Thr  
565 570 575  
Glu Thr Val Gln Pro Glu Val Lys Ser Glu Thr Glu Pro His Phe Ile  
580 585 590  
Leu Lys Ser Ser Asp Asn Thr Lys Thr Tyr Ser Leu Met Pro Ser Ala  
595 600 605  
Pro His Pro Val Lys Glu Ala Ser Pro Gly Phe Ser Trp Ser Pro Lys  
610 615 620  
Thr Ala Ser Ala Thr Pro Ala Pro Pro Lys Asn Asp Ala Thr Ala Ser  
625 630 635 640  
Cys Gly Phe Ser Glu Arg Ser Ser Thr Pro His Cys Thr Met Pro Ser

645	650	655
Gly Arg Leu Ser Gly Ala Asn Ala Ala Ala Ala Asp Gly Pro Gly Ile		
660	665	670
Ser Gln Leu Gly Glu Val Ala Pro Leu Pro Thr Leu Ser Ala Pro Val		
675	680	685
Met Glu Pro Leu Ile Asn Ser Glu Pro Ser Thr Gly Val Thr Glu Pro		
690	695	700
Leu Thr Pro His Gln Pro Asn His Gln Pro Ser Phe Leu Thr Ser Pro		
705	710	715
Gln Asp Leu Ala Ser Ser Pro Met Glu Glu Asp Glu Gln His Ser Glu		
725	730	735
Ala Asp Glu Pro Pro Ser Asp Glu Pro Leu Ser Asp Asp Pro Leu Ser		
740	745	750
Pro Ala Glu Glu Lys Leu Pro His Ile Asp Glu Tyr Trp Ser Asp Ser		
755	760	765
Glu His Ile Phe Leu Asp Ala Asn Ile Gly Gly Val Ala Ile Ala Pro		
770	775	780
Ala His Gly Ser Val Leu Ile Glu Cys Ala Arg Arg Glu Leu His Ala		
785	790	795
Thr Thr Pro Val Glu His Pro Asn Arg Asn His Pro Thr Arg Leu Ser		
805	810	815
Leu Val Phe Tyr Gln His Lys Asn Leu Asn Lys Pro Gln His Gly Phe		
820	825	830
Glu Leu Asn Lys Ile Lys Phe Glu Ala Lys Glu Ala Lys Asn Lys Lys		
835	840	845
Met Lys Ala Ser Glu Gln Lys Asp Gln Ala Ala Asn Glu Gly Pro Glu		
850	855	860
Gln Ser Ser Glu Val Asn Glu Leu Asn Gln Ile Pro Ser His Lys Ala		
865	870	875
		880

Leu Thr Leu Thr His Asp Asn Val Val Thr Val Ser Pro Tyr Ala Leu

885 890 895

Thr His Val Ala Gly Pro Tyr Asn His Trp Val

900 905

<210> 2663

<211> 339

<212> PRT

<213> Homo sapiens

<400> 2663

Met Ala His Ala Leu Arg Arg Ile Leu Tyr Ser Thr Trp Cys Pro Ala

1 5 10 15

Asp Cys Gln Phe Ala Phe Met Ala Arg Asn Pro Arg Ser Pro Ala Ser

20 25 30

Lys Leu Phe Cys His Leu Phe Val Gly Ser Gln Pro Gly Glu Val Gln

35 40 45

Ile Leu His Leu Leu Leu Cys Arg Ser Phe Gln Leu Ala Tyr Leu Leu

50 55 60

Gln His Pro Glu Glu Arg Ala Gln Pro Glu Pro Cys Pro Gly Pro Thr

65 70 75 80

Gly Glu Val Pro Leu Lys Pro Leu Ser Ser Ser Gly Gly Leu Val Arg

85 90 95

Glu Pro Phe Gly Arg Asp Gln Leu Ser Gln Asn Val His Ala Leu Val

100 105 110

Ser Phe Arg Arg Leu Pro Ala Glu Gly Leu Val Gly Ser Gly Lys Glu

115 120 125

Leu Pro Glu Ser Glu Gly Arg Ala Arg His Ala Arg Leu Gly Asn Pro

130	135	140
Tyr Cys Ser Pro Thr Leu Val Arg Lys Lys Ala Ile Arg Ser Lys Val		
145	150	155
Ile Arg Ser Gly Ala Tyr Arg Gly Cys Thr Tyr Glu Thr Gln Leu Gln		
165	170	175
Leu Ser Ala Arg Glu Ala Phe Pro Ala Ala Trp Glu Ala Trp Pro Arg		
180	185	190
Gly Pro Gly Gly His Ser Cys Leu Val Glu Ser Glu Gly Ser Leu Thr		
195	200	205
Glu Asn Ile Trp Ala Phe Ala Gly Ile Ser Arg Pro Cys Ala Leu Ala		
210	215	220
Leu Leu Arg Arg Asp Val Leu Gly Ala Phe Leu Leu Trp Pro Glu Leu		
225	230	235
Gly Ala Ser Gly Gln Trp Cys Leu Ser Val Arg Thr Gln Cys Gly Val		
245	250	255
Val Pro His Gln Val Phe Arg Asn His Leu Gly Arg Tyr Cys Leu Glu		
260	265	270
His Leu Pro Ala Glu Phe Pro Ser Leu Glu Ala Leu Val Glu Asn His		
275	280	285
Ala Val Thr Glu Arg Ser Leu Phe Cys Pro Leu Asp Met Gly Arg Leu		
290	295	300
Asn Pro Thr Tyr Glu Glu Gln Asp Cys Gly Pro Pro Gly Arg Pro Pro		
305	310	315
Arg Thr Leu Arg Pro Leu Ser His Ala Lys Ser Glu Ala Glu Leu Gln		
325	330	335
Gly Leu Gly		

&lt;210&gt; 2664

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2664

Met Lys Ser Cys Thr Ala Val Val Arg Arg Ser Trp His Leu Phe Gly  
1 5 10 15  
Lys His Gln Pro Gln Gln Met Gln Leu Leu His Phe Ile Pro Lys Asp  
20 25 30  
Gln Val Leu Leu Leu Lys Glu Leu Cys Ile Pro Leu Ser Ser Pro Glu  
35 40 45  
Pro His Ser Ser His Trp Leu Ser Phe Ser Phe Pro Phe Arg Val Thr  
50 55 60  
His Arg Pro Ser Pro Ser Val Pro Val Arg Leu Cys Cys Glu Arg Asp  
65 70 75 80  
Glu Ala Phe Pro Val Lys Ser Phe His Glu Leu Ile Leu Ile Leu Leu  
85 90 95  
Pro His Phe His Pro Trp Cys Asp Cys Phe Ala Ile Gln Asp Tyr Leu  
100 105 110

&lt;210&gt; 2665

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2665

Met Lys Lys Val Leu Ile Gly Val Val Val Gly Val Phe Glu Cys Pro



1                      5                      10                      15  
 Leu Pro Ser Leu Cys Pro Met Phe Ser Leu Cys Gly Gln Arg Gly Thr  
                     20                      25                      30  
 Gly Phe Gly Thr Val Leu Ile Thr Ala Gly Leu Pro Phe Thr Ala Gly  
                     35                      40                      45  
 Ser Arg Leu Trp Val Gly Val Gly Val Val Pro Leu Cys Leu Leu Leu  
                     50                      55                      60  
 Leu Pro Leu Leu Ala Leu Gln Thr Tyr Tyr Phe Arg Val Ser Gly Leu  
                     65                      70                      75                      80  
 Leu His Gly Trp Gln Ser His Ala His Thr Arg Gly Glu Glu His Gly  
                     85                      90                      95  
 Trp Val Asn Glu Ser Arg Arg Tyr Ser Trp Asp Glu Lys Trp Val Lys  
                     100                      105                      110  
 Ser His Arg Thr Thr Ser Ser Tyr Cys Arg Phe Arg Leu Ile Arg Lys  
                     115                      120                      125  
 Trp Thr Trp Thr Arg Leu Val Leu Ser  
                     130                      135

<210> 2666

<211> 212

<212> PRT

<213> Homo sapiens

<400> 2666

Met Asp Gly Trp Met Asp Gly Trp Val Gly Gly Trp Gly Trp Met Asp  
 1                      5                      10                      15  
 Arg Trp Met Asp Gly Trp Thr Asp Gly Val Gly Glu Gly Arg Lys Gly  
                     20                      25                      30

Gly Arg Lys Glu Gly Ile Leu Ala Pro Ser Leu Arg Ala Leu Val Gly  
35 40 45  
Arg Ala Glu Thr Gly His Ser Ala Gln Pro Gly His Pro His Glu Gly  
50 55 60  
Ser Gln Val Thr Leu Val Ala Gln Ile Ala Leu Arg Thr Trp Arg Asp  
65 70 75 80  
Arg Pro Glu Ser Gly Ser Pro Pro Leu Pro Leu Ser Ser Leu Leu Phe  
85 90 95  
Pro Gln Ala Trp Glu Gln Ser Ile Pro Gln Pro Cys His Leu Pro Tyr  
100 105 110  
Ser Ser Leu Phe His Ser Phe Pro Phe Leu Ala Pro Ser Ala Leu Pro  
115 120 125  
Val Phe Pro Glu Cys Leu Arg Gly Glu Arg Asp Pro His Leu Pro Lys  
130 135 140  
Glu Met Ser Phe Trp Gly Thr Thr Ser His Arg Ser Pro Pro His Pro  
145 150 155 160  
Thr Thr Pro Pro Thr Trp Pro Leu Ala Lys Ser Gln Ala Glu Leu Ala  
165 170 175  
Thr Gly Lys Ala Glu Pro Gln Glu Arg His Ser Thr Ile Tyr Thr Leu  
180 185 190  
Leu Tyr Ile Leu Phe Leu Leu Tyr Ile His Ser Val His Val Gly Val  
195 200 205  
Asn Ala Val Lys  
210

&lt;210&gt; 2667

&lt;211&gt; 1084

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2667

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Met Val Ala Leu Arg Gly Leu Gly Ser Gly Leu Gln Pro Trp Cys Pro
  1             5             10             15
Leu Asp Leu Arg Leu Glu Trp Val Asp Thr Val Trp Glu Leu Asp Phe
      20             25             30
Thr Glu Thr Glu Pro Leu Asp Pro Ser Ile Glu Ala Glu Ile Ile Glu
      35             40             45
Thr Gly Leu Ala Ala Phe Thr Lys Leu Tyr Glu Ser Leu Leu Pro Phe
      50             55             60
Ala Thr Gly Glu His Gly Ser Met Glu Ser Ile Trp Thr Phe Phe Ile
      65             70             75             80
Glu Asn Asn Val Ser His Ser Thr Leu Val Ala Leu Phe Tyr His Phe
      85             90             95
Val Gln Ile Val His Lys Lys Asn Val Ser Val Gln Tyr Arg Glu Tyr
      100            105            110
Gly Leu His Ala Ala Gly Leu Tyr Phe Leu Leu Leu Glu Val Pro Gly
      115            120            125
Ser Val Ala Asn Gln Val Phe His Pro Val Met Phe Asp Lys Cys Ile
      130            135            140
Gln Thr Leu Lys Lys Ser Trp Pro Gln Glu Ser Asn Leu Asn Arg Lys
      145            150            155            160
Arg Lys Lys Glu Gln Pro Lys Ser Ser Gln Ala Asn Pro Gly Arg His
      165            170            175
Arg Lys Arg Gly Lys Pro Pro Arg Arg Glu Asp Ile Glu Met Asp Glu
      180            185            190
Ile Ile Glu Glu Gln Glu Asp Glu Asn Ile Cys Phe Ser Ala Arg Asp
      195            200            205

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Leu Ser Gln Ile Arg Asn Ala Ile Phe His Leu Leu Lys Asn Phe Leu  
210 215 220  
Arg Leu Leu Pro Lys Phe Ser Leu Lys Glu Lys Pro Gln Cys Val Gln  
225 230 235 240  
Asn Cys Ile Glu Val Phe Val Ser Leu Thr Asn Phe Glu Pro Val Leu  
245 250 255  
His Glu Cys His Val Thr Gln Ala Arg Ala Leu Asn Gln Ala Lys Tyr  
260 265 270  
Ile Pro Glu Leu Ala Tyr Tyr Gly Leu Tyr Leu Leu Cys Ser Pro Ile  
275 280 285  
His Gly Glu Gly Asp Lys Val Ile Ser Cys Val Phe His Gln Met Leu  
290 295 300  
Ser Val Ile Leu Met Leu Glu Val Gly Glu Gly Ser His Arg Ala Pro  
305 310 315 320  
Leu Ala Val Thr Ser Gln Val Ile Asn Cys Arg Asn Gln Ala Val Gln  
325 330 335  
Phe Ile Ser Ala Leu Val Asp Glu Leu Lys Glu Ser Ile Phe Pro Val  
340 345 350  
Val Arg Ile Leu Leu Gln His Ile Cys Ala Lys Val Val Asp Lys Ser  
355 360 365  
Glu Tyr Arg Thr Phe Ala Ala Gln Ser Leu Val Gln Leu Leu Ser Lys  
370 375 380  
Leu Pro Cys Gly Glu Tyr Ala Met Phe Ile Ala Trp Leu Tyr Lys Tyr  
385 390 395 400  
Ser Arg Ser Ser Lys Ile Pro His Arg Val Phe Thr Leu Asp Val Val  
405 410 415  
Leu Ala Leu Leu Glu Leu Pro Glu Arg Glu Val Asp Asn Thr Leu Ser  
420 425 430  
Leu Glu His Gln Lys Phe Leu Lys His Lys Phe Leu Val Gln Glu Ile

435	440	445
Met Phe Asp Arg Cys Leu Asp Lys Ala Pro Thr Val Arg Ser Lys Ala		
450	455	460
Leu Ser Ser Phe Ala His Cys Leu Glu Leu Thr Val Thr Ser Ala Ser		
465	470	475
Glu Ser Ile Leu Glu Leu Leu Ile Asn Ser Pro Thr Phe Ser Val Ile		
485	490	495
Glu Ser His Pro Gly Thr Leu Leu Arg Asn Ser Ser Ala Phe Ser Tyr		
500	505	510
Gln Arg Gln Thr Ser Asn Arg Ser Glu Pro Ser Gly Glu Ile Asn Ile		
515	520	525
Asp Ser Ser Gly Glu Thr Val Gly Ser Gly Glu Arg Cys Val Met Ala		
530	535	540
Met Leu Arg Arg Arg Ile Arg Asp Glu Lys Thr Asn Val Arg Lys Ser		
545	550	555
Ala Leu Gln Val Leu Val Ser Ile Leu Lys His Cys Asp Val Ser Gly		
565	570	575
Met Lys Glu Asp Leu Trp Ile Leu Gln Asp Gln Cys Arg Asp Pro Ala		
580	585	590
Val Ser Val Arg Lys Gln Ala Leu Gln Ser Leu Thr Glu Leu Leu Met		
595	600	605
Ala Gln Pro Arg Cys Val Gln Ile Gln Lys Ala Trp Leu Arg Gly Val		
610	615	620
Val Pro Val Val Met Asp Cys Glu Ser Thr Val Gln Glu Lys Ala Leu		
625	630	635
Glu Phe Leu Asp Gln Leu Leu Leu Gln Asn Ile Arg His His Ser His		
645	650	655
Phe His Ser Gly Asp Asp Ser Gln Val Leu Ala Trp Ala Leu Leu Thr		
660	665	670

Leu Leu Thr Thr Glu Ser Gln Glu Leu Ser Arg Tyr Leu Asn Lys Ala  
675 680 685

Phe His Ile Trp Ser Lys Lys Glu Lys Phe Ser Pro Thr Phe Ile Asn  
690 695 700

Asn Val Ile Ser His Thr Gly Thr Glu His Ser Ala Pro Ala Trp Met  
705 710 715 720

Leu Leu Ser Lys Ile Ala Gly Ser Ser Pro Arg Leu Asp Tyr Ser Arg  
725 730 735

Ile Ile Gln Ser Trp Glu Lys Ile Ser Ser Gln Gln Asn Pro Asn Ser  
740 745 750

Asn Thr Leu Gly His Ile Leu Cys Val Ile Gly His Ile Ala Lys His  
755 760 765

Leu Pro Lys Ser Thr Arg Asp Lys Val Thr Asp Ala Val Lys Cys Lys  
770 775 780

Leu Asn Gly Phe Gln Trp Ser Leu Glu Val Ile Ser Ser Ala Val Asp  
785 790 795 800

Ala Leu Gln Arg Leu Cys Arg Ala Ser Ala Glu Thr Pro Ala Glu Glu  
805 810 815

Gln Glu Leu Leu Thr Gln Val Cys Gly Asp Val Leu Ser Thr Cys Glu  
820 825 830

His Arg Leu Ser Asn Ile Val Leu Lys Glu Asn Gly Thr Gly Asn Met  
835 840 845

Asp Glu Asp Leu Leu Val Lys Tyr Ile Phe Thr Leu Gly Asp Ile Ala  
850 855 860

Gln Leu Cys Pro Ala Arg Val Glu Lys Arg Ile Phe Leu Leu Ile Gln  
865 870 875 880

Ser Val Leu Ala Ser Ser Ala Asp Ala Asp His Ser Pro Ser Ser Gln  
885 890 895

Gly Ser Ser Glu Ala Pro Ala Ser Gln Pro Pro Pro Gln Val Arg Gly

900	905	910	
Ser Val Met Pro Ser Val Ile Arg Ala His Ala Ile Ile Thr Leu Gly			
915	920	925	
Lys Leu Cys Leu Gln His Glu Asp Leu Ala Glu Lys Ser Ile Pro Ala			
930	935	940	
Leu Val Arg Glu Leu Glu Val Cys Glu Asp Val Ala Val Arg Asn Asn			
945	950	955	960
Val Ile Ile Val Met Cys Asp Leu Cys Ile Arg Tyr Thr Ile Met Val			
965	970	975	
Asp Lys Tyr Ile Pro Asn Ile Ser Met Cys Leu Lys Asp Ser Asp Pro			
980	985	990	
Phe Ile Arg Lys Gln Thr Leu Ile Leu Leu Thr Asn Leu Leu Gln Glu			
995	1000	1005	
Glu Phe Val Lys Trp Lys Gly Ser Leu Phe Phe Arg Phe Val Ser Thr			
1010	1015	1020	
Leu Ile Asp Ser His Pro Asp Ile Ala Ser Phe Gly Glu Phe Cys Leu			
1025	1030	1035	1040
Ala His Leu Leu Leu Lys Arg Asn Pro Val Met Phe Phe Gln His Phe			
1045	1050	1055	
Ile Glu Cys Ile Phe His Phe Asn Asn Tyr Glu Lys His Glu Lys Tyr			
1060	1065	1070	
Asn Lys Phe Pro Gln Ser Glu Arg Ala Leu His Arg			
1075	1080		

&lt;210&gt; 2668

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2668

Met Arg Ala Ser Gly His Pro Val Thr Leu Pro Thr Pro Glu Gly Gln  
 1 5 10 15  
 Val His His Pro Glu Ser Cys Leu Ile Ser Leu Gln Thr His Cys His  
 20 25 30  
 Asn Asp Ile Val Asn Leu Leu Leu Asp Cys Gly Ala Asp Val Asn Lys  
 35 40 45  
 Cys Ser Asp Glu Gly Leu Thr Ala Leu Ser Met Cys Phe Leu Leu His  
 50 55 60  
 Tyr Pro Ala Gln Ser Phe Lys Pro Asn Val Ala Glu Arg Thr Ile Pro  
 65 70 75 80  
 Glu Pro Gln Glu Pro Pro Lys Phe Pro Val Val Pro Ile Leu Ser Ser  
 85 90 95  
 Ser Phe Met Asp Thr Asn Leu Glu Ser Leu Tyr Tyr Glu Val Asn Val  
 100 105 110  
 Pro Ser Gln Gly Ser Tyr Glu Leu Arg Pro Pro Pro Ala Pro Leu Leu  
 115 120 125  
 Leu Pro Arg Val Ser Gly Ser His Glu Gly Gly His Phe Gln Asp Thr  
 130 135 140  
 Gly Gln Cys Gly Gly Ser Met Asp His Arg Ser Ser Ser Leu Lys Gly  
 145 150 155 160  
 Asp Ser Pro Leu Val Lys Gly Ser Leu Gly His Val Glu Ser Gly Leu  
 165 170 175  
 Glu Asp Val Leu Gly Asn Thr Asp Arg Gly Ser Leu Cys Ser Ala Glu  
 180 185 190  
 Thr Lys Phe Glu Ser Asn Val Cys Val Cys Asp Phe Ser Ile Glu Leu  
 195 200 205  
 Ser Gln Ala Met Leu Glu Arg Ser Ala Gln Ser His Ser Leu Leu Lys



210                      215                      220  
 Met Ala Ser Pro Ser Pro Cys Thr Ser Ser Phe Asp Lys Gly Thr Met  
 225                      230                      235                      240  
 Arg Arg Met Ala Leu Ser Met Ile Glu  
 245

<210> 2669

<211> 613

<212> PRT

<213> Homo sapiens

<400> 2669

Met Ala Thr Ile Pro Asp Trp Lys Leu Gln Leu Leu Ala Arg Arg Arg  
 1                      5                      10                      15  
 Gln Glu Glu Ala Ser Val Arg Gly Arg Glu Lys Ala Glu Arg Glu Arg  
 20                      25                      30  
 Leu Ser Gln Met Pro Ala Trp Lys Arg Gly Leu Leu Glu Arg Arg Arg  
 35                      40                      45  
 Ala Lys Leu Gly Leu Ser Pro Gly Glu Pro Ser Pro Val Leu Gly Thr  
 50                      55                      60  
 Val Glu Ala Gly Pro Pro Asp Pro Asp Glu Ser Ala Val Leu Leu Glu  
 65                      70                      75                      80  
 Ala Ile Gly Pro Val His Gln Asn Arg Phe Ile Arg Gln Glu Arg Gln  
 85                      90                      95  
 Gln Gln Gln Gln Gln Gln Gln Arg Ser Glu Glu Leu Leu Ala Glu Arg  
 100                      105                      110  
 Lys Pro Gly Pro Leu Glu Ala Arg Glu Arg Arg Pro Ser Pro Gly Glu  
 115                      120                      125

Met Arg Asp Gln Ser Pro Lys Gly Arg Glu Ser Arg Glu Glu Arg Leu  
 130 135 140  
 Ser Pro Arg Glu Thr Arg Glu Arg Arg Leu Gly Ile Gly Gly Ala Gln  
 145 150 155 160  
 Glu Leu Ser Leu Arg Pro Leu Glu Ala Arg Asp Trp Arg Gln Ser Pro  
 165 170 175  
 Gly Glu Val Gly Asp Arg Ser Ser Arg Leu Ser Glu Ala Trp Lys Trp  
 180 185 190  
 Arg Leu Ser Pro Gly Glu Thr Pro Glu Arg Ser Leu Arg Leu Ala Glu  
 195 200 205  
 Ser Arg Glu Gln Ser Pro Arg Arg Lys Glu Val Glu Ser Arg Leu Ser  
 210 215 220  
 Pro Gly Glu Ser Ala Tyr Gln Lys Leu Gly Leu Thr Glu Ala His Lys  
 225 230 235 240  
 Trp Arg Pro Asp Ser Arg Glu Ser Gln Glu Gln Ser Leu Val Gln Leu  
 245 250 255  
 Glu Ala Thr Glu Trp Arg Leu Arg Ser Gly Glu Glu Arg Gln Asp Tyr  
 260 265 270  
 Ser Glu Glu Cys Gly Arg Lys Glu Glu Trp Pro Val Pro Gly Val Ala  
 275 280 285  
 Pro Lys Glu Thr Ala Glu Leu Ser Glu Thr Leu Thr Arg Glu Ala Gln  
 290 295 300  
 Gly Asn Ser Ser Ala Gly Val Glu Ala Ala Glu Gln Arg Pro Val Glu  
 305 310 315 320  
 Asp Gly Glu Arg Gly Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu  
 325 330 335  
 Asn Ser Gly Lys Ala Arg Glu Trp Thr Pro Arg Asp Ile Glu Ala Gln  
 340 345 350  
 Thr Gln Lys Pro Glu Pro Pro Glu Ser Ala Glu Lys Leu Leu Glu Ser

355 360 365  
Pro Gly Val Glu Ala Gly Glu Gly Glu Ala Glu Lys Glu Glu Ala Gly  
370 375 380  
Ala Gln Gly Arg Pro Leu Arg Ala Leu Gln Asn Cys Cys Ser Val Pro  
385 390 395 400  
Ser Pro Leu Pro Pro Glu Asp Ala Gly Thr Gly Gly Leu Arg Gln Gln  
405 410 415  
Glu Glu Glu Ala Val Glu Leu Gln Pro Pro Pro Pro Ala Pro Leu Ser  
420 425 430  
Pro Pro Pro Pro Ala Pro Thr Ala Pro Gln Pro Pro Gly Asp Pro Leu  
435 440 445  
Met Ser Arg Leu Phe Tyr Gly Val Lys Ala Gly Pro Gly Val Gly Ala  
450 455 460  
Pro Arg Arg Ser Gly His Thr Phe Thr Val Asn Pro Arg Arg Ser Val  
465 470 475 480  
Pro Pro Ala Thr Pro Ala Thr Pro Thr Ser Pro Ala Thr Val Asp Ala  
485 490 495  
Ala Val Pro Gly Ala Gly Lys Lys Arg Tyr Pro Thr Ala Glu Glu Ile  
500 505 510  
Leu Val Leu Gly Gly Tyr Leu Arg Leu Ser Arg Ser Cys Leu Ala Lys  
515 520 525  
Gly Ser Pro Glu Arg His His Lys Gln Leu Lys Ile Ser Phe Ser Glu  
530 535 540  
Thr Ala Leu Glu Thr Thr Tyr Gln Tyr Pro Ser Glu Ser Ser Val Leu  
545 550 555 560  
Glu Glu Leu Gly Pro Glu Pro Glu Val Pro Ser Ala Pro Asn Pro Pro  
565 570 575  
Ala Ala Gln Pro Asp Asp Glu Glu Asp Glu Glu Glu Leu Leu Leu Leu  
580 585 590

Gln Pro Glu Leu Gln Gly Gly Leu Arg Thr Lys Ala Leu Ile Val Asp

595

600

605

Glu Ser Cys Arg Arg

610

<210> 2670

<211> 329

<212> PRT

<213> Homo sapiens

<400> 2670

Met Leu Pro Leu Glu Pro Tyr Leu Thr Gln Thr Ser Ala Val Pro Gln

1

5

10

15

Met Ser His Phe Met Cys His Ser Pro Thr His Lys Pro Gln Gly Leu

20

25

30

Leu Pro Trp Ala Pro Phe His Gln Ala Ser Val Ser Leu Tyr Pro Ile

35

40

45

Ser Pro Trp Pro Ser Glu Ser Val Cys Pro Pro Thr Cys Pro Gly Gly

50

55

60

Ala Ser Cys Trp Phe Pro Ala Gly Asn Ala Trp Asp Arg Val Glu Leu

65

70

75

80

Gly Phe Leu Gly Phe Gly Ala Gly Gly Val Ser Ile Ala Val Pro Gly

85

90

95

Phe Pro Leu Ser Cys Gly Gln Gly Cys Cys Ala Gly Gly Trp Leu Gly

100

105

110

His Gly Ala Arg Phe Pro Ala Lys Leu Arg Ala Phe Pro Gln Val Ile

115

120

125

Arg Arg Gly Trp Leu Thr Ile Asn Asn Ile Ser Leu Met Lys Gly Gly

130	135	140
Ser Lys Glu Tyr Trp Phe Val Leu Thr Ala Glu Ser Leu Ser Trp Tyr		
145	150	155
Lys Asp Glu Glu Glu Lys Glu Lys Lys Tyr Met Leu Pro Leu Asp Asn		160
	165	170
Leu Lys Ile Arg Asp Val Glu Lys Gly Phe Met Ser Asn Lys His Val		175
	180	185
Phe Ala Ile Phe Asn Thr Glu Gln Arg Asn Val Tyr Lys Asp Leu Arg		190
	195	200
Gln Ile Glu Leu Ala Cys Asp Ser Gln Glu Asp Val Asp Ser Trp Lys		205
	210	215
Ala Ser Phe Leu Arg Ala Gly Val Tyr Pro Glu Lys Asp Gln Val Arg		220
225	230	235
Ser Arg Pro Ala Gln Pro Gly Pro Glu Pro Pro Pro Gly Arg Gly Ser		240
	245	250
Arg Ala Gly Phe Pro Gln Asp Arg Ser Phe Ser Gly His Val Ser Gln		255
	260	265
Glu Ser Leu Lys Ser Cys Ser Arg Cys Pro Leu Glu Gln Ala Lys Glu		270
	275	280
Lys Leu Gly Val Leu Cys His Gln Gly Pro Glu Ser Ser Leu Thr Glu		285
	290	295
Ala Ser Asp Arg Gly Thr Gln Gly Met Gly Ser His Leu Leu Cys Ser		300
305	310	315
Leu Leu Phe Ser Pro Ser Ile Leu Arg		320
	325	

&lt;210&gt; 2671

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2671

Met Val Phe His Tyr Ile Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser  
1 5 10 15  
Ser Asp Leu Pro Ala Leu Ala Ser Arg Asn Ala Gly Val Thr Gly Met  
20 25 30  
Ser Tyr His Ala Arg Pro Gln Asn Pro Gly Thr Ser Ala Gly Ala Arg  
35 40 45  
Gly Gln Asn Arg Leu Leu Tyr Trp Asp Cys Leu Ala Gly Arg Thr Asp  
50 55 60  
Ala Gln Gly Gly Pro Met Arg Thr Gln Pro Pro Gly Lys Met Val Glu  
65 70 75 80  
Gly Lys Ile Leu Pro Thr Ser Ser Asp Ser Leu Ser Gln Leu His Trp  
85 90 95  
Ser Ile Ile Ser Phe Leu Phe Leu Lys Ser Val Ser Leu Val Ser Val  
100 105 110  
Pro Gly Lys Trp Thr Gln Phe  
115

&lt;210&gt; 2672

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2672

Met Ala Gly Cys Val His Leu Leu Ala Met Val Ile Leu Ser Ser Gly



Cys Phe Ser Pro Ser Tyr Leu Arg Gly Cys Thr Leu Gln Pro Pro Ile  
                     20                    25                    30  
 Gly Ser Leu Pro Pro Pro Thr Val Pro Ser Ile Thr Pro Cys Pro Gln  
                     35                    40                    45  
 Gly Gly Ser Phe Pro Ser Pro Gly Ser Arg Ala Cys Leu Arg Leu Arg  
                     50                    55                    60  
 Asp Ser Leu Pro Leu Asp Glu Gly Val Leu Gly Phe Pro Ser Cys Phe  
                     65                    70                    75                    80  
 Leu Leu Ser Trp Ala Thr Pro Ser His Pro Gly Val Gly Glu Glu Gln  
                                     85                    90                    95  
 Gly Val Gly Ala His Ser Phe Pro Leu Leu Leu Pro Glu Leu Val Cys  
                     100                    105                    110  
 Thr Ala Leu Val Cys Gly Ala Arg Met Cys Leu Ser Pro Glu Ser  
                     115                    120                    125

<210> 2674

<211> 272

<212> PRT

<213> Homo sapiens

<400> 2674

Met His Gly Ala Leu Phe Arg Leu His Gly Gln Ala Gly His Arg Gln  
           1                    5                    10                    15  
 Arg Arg Pro Pro Ala Leu Thr Cys Leu Cys Gly Leu Thr Arg Glu Gly  
                     20                    25                    30  
 Ala Asp Arg Val Leu Ser Ala Glu Val Lys Ala Leu His Glu Ala Ile  
                     35                    40                    45  
 Leu Gly Ala Thr Glu Gln His Val Gly Phe Gly Gly Val Glu Ala Asp



出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;210&gt; 2675

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

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Met Asp Asn Thr Cys Tyr Pro Cys Pro Ala Pro Arg Ala Arg Lys Tyr
  1             5             10             15
Lys Cys Gly Leu Pro Gln Pro Cys Pro Glu Glu His Leu Ala Phe Arg
             20             25             30
Val Val Ser Gly Ala Ala Asn Val Ile Gly Pro Lys Ile Cys Leu Glu
             35             40             45
Asp Lys Met Leu Met Ser Ser Val Lys Asp Asn Val Gly Arg Gly Leu
             50             55             60
Asn Ile Ala Leu Val Asn Gly Val Ser Gly Glu Leu Ile Glu Ala Arg
             65             70             75             80
Ala Phe Asp Met Trp Ala Gly Asp Val Asn Asp Leu Leu Lys Phe Ile
             85             90             95
Arg Pro Leu His Glu Gly Thr Leu Val Phe Val Ala Ser Tyr Asp Asp
             100            105            110
Pro Ala Thr Lys Met Asn Glu Glu Thr Arg Lys Leu Phe Ser Glu Leu
             115            120            125
Gly Ser Arg Asn Ala Lys Glu Leu Ala Phe Arg Asp Ser Trp Val Phe
             130            135            140
Val Gly Ala Lys Gly Val Gln Asn Lys Ser Pro Phe Glu Gln His Val
             145            150            155            160
Lys Asn Ser Lys His Ser Asn Lys Tyr Glu Gly Trp Pro Glu Ala Leu
             165            170            175
Glu Met Glu Gly Cys Ile Pro Arg Arg Ser Thr Ala Ser

```

180

185

&lt;210&gt; 2676

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

Met Thr Pro Gly Pro Asn His His Pro Gly Arg Arg Ala Gln Leu Ser

1

5

10

15

Arg Thr Ser Pro Tyr Ile Phe Leu Pro His His Glu Ser Ile Tyr Gln

20

25

30

Gln Ala Tyr Arg His Pro Leu Arg Ala Ala Pro Glu Glu Val Ala Gly

35

40

45

Cys Gly Ile Leu Arg Ser Leu His Ser Ser Lys Ser Gly Leu Ala Trp

50

55

60

Gly Thr Leu Pro Asp Leu Glu Glu Asp Pro Glu Ala Glu Gly Ser Glu

65

70

75

80

Leu Arg Ala Phe Pro Ala Pro Ala Pro Ser Trp Gln Gln Thr Cys His

85

90

95

Gln Ala Leu Gly Lys Ser Cys Phe Cys Gly Leu Ser Pro Ser Ser Arg

100

105

110

Pro Leu Glu Leu Pro Pro Pro Ser Cys Pro Phe Phe Ser Lys Ala Pro

115

120

125

Trp Val Arg Ile Arg Gly Ser Val Cys Ser Leu Ile

130

135

140

&lt;210&gt; 2677

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2677

Met Val Arg Met Ser Arg Pro Leu Phe Leu Asp Trp Ala Trp Arg Pro  
1 5 10 15  
Leu Cys Ser Pro Ser Gln Ser Leu Pro Leu Thr Tyr Gly Pro Glu Gly  
20 25 30  
Trp Ile Leu Gln Trp Lys Gly Thr Cys Arg Gln Gln Thr Ala Leu His  
35 40 45  
Cys Pro Phe Asp Phe Pro Gln Ala Pro Leu Arg Gly Arg His Thr Leu  
50 55 60  
Ser Gln Val Pro Asn Lys Gly His Glu Lys Ala Ser Ala Val Gln Leu  
65 70 75 80  
Pro Glu Lys Gln Gly Thr Asp Gln Ser Arg Arg Gly Pro Thr Ser Ala  
85 90 95  
Val Thr Lys Ala Arg Thr Ser Tyr Pro Glu Ser Glu Thr Phe Ile Val  
100 105 110  
Tyr Leu Cys Ser Tyr Phe Trp Asn Ser Ser Lys Gly Val Tyr Met Ser  
115 120 125  
Gly Ser Thr  
130

&lt;210&gt; 2678

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2678

Met Asp Ser Gln Lys Ser Ala Cys Glu Met Gly Leu Ala Arg Ala Pro  
 1 5 10 15  
 Gln Gly Gln Ala Pro Gln Glu Ile Cys Pro Gln Pro Ala Pro Pro Gly  
 20 25 30  
 Asp Arg Pro Pro Thr Val Ala Cys Met Ala Gly Arg Gly Met Ala Leu  
 35 40 45  
 Ser Pro Gln His His Pro Tyr Thr Cys Cys Leu Tyr Gln His Pro Leu  
 50 55 60  
 Leu Pro Pro Pro Pro Pro Ala Thr Thr Val His Ser Leu Pro His Arg  
 65 70 75 80  
 Pro Ala Phe Pro His Pro Pro Asn Thr Cys Thr His Ser Ile Pro Phe  
 85 90 95  
 Pro His Val Leu Leu Arg Thr Gly Ala Trp Ala Ser Gly Thr Ala Trp  
 100 105 110  
 Glu Ser Thr Pro Trp Trp Asp Met Lys Arg Ile Leu Gly Val Trp Phe  
 115 120 125  
 Val Asp Gln Gly Ser Leu Leu Thr Val Trp Gly Glu Val Ser Gly Gly  
 130 135 140  
 Trp Thr Arg Ala Ser Glu Leu Gln Arg Cys Phe Phe Leu Lys Pro Ser  
 145 150 155 160  
 Ser Asp Ser Met Gly Leu Ala  
 165

&lt;210&gt; 2679

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2679

Met Thr Thr Thr Ala Pro Gly Val Gly Ser Glu Ser Gln Val Glu Arg  
1 5 10 15  
Leu Leu Ala Cys Gly Gly Arg Trp Gly Ala Arg Arg Gln Gly Cys Cys  
20 25 30  
Trp His Asp Leu Pro Lys Ala Pro His Ala Gly Cys Phe Leu Ala Ser  
35 40 45  
Ser Leu Arg Val Gln Val Arg Gln Lys Pro Leu Asn Val Arg Leu Gln  
50 55 60  
Asp Pro Val Pro Ala Val Ala Val Leu Gly Glu Lys Lys Val Gly Asp  
65 70 75 80  
Asp Gln Glu Pro Cys Thr Lys Thr Ala Ala Val Arg Glu Gly Glu Ser  
85 90 95  
Val Gly Cys Thr Ala Glu Gly Gly Cys Leu Gly Leu Ser Gly Gly Cys  
100 105 110  
Gln Gly Trp Leu Ala Pro Gly Leu Val Glu Leu Arg Ser Ala Ala Leu  
115 120 125  
Asn Val Cys Ser Gly Tyr Phe Val Leu  
130 135

&lt;210&gt; 2680

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2680

Met Ser Thr Leu Ser Gly Arg Pro Leu Ser Ser Leu Leu Leu Gly Gln

1 5 10 15

Gly Asp His Arg Ser Ala Thr Trp Leu Gly Arg Gly Gly Gly Ala Gly

20 25 30

Pro Gly Gln Ser Gly Pro Gly His Gly Gln Gly Thr Ala Thr Ser Trp

35 40 45

Ala Arg Thr Gly Glu Arg Gly Ala Gly Pro Gly Pro Ala Cys Pro Arg

50 55 60

Cys Ala Gly Glu Ala Ser Arg Gly Arg Gln Arg Ala Arg Ser Gly Pro

65 70 75 80

Arg Arg Ser Pro Arg Pro Pro Arg Cys Pro Ala Pro Arg Leu Ala Asp

85 90 95

Pro Ala Ser Ser Arg Ser Asp Ala Pro Ala Pro Pro Arg Gly Arg Ser

100 105 110

Pro Arg Val Leu Leu Phe Pro Gln Val Gln Ala Glu Pro Leu Glu Pro

115 120 125

Trp Pro Ala Leu Pro Ala Ala Pro Lys Pro Leu Ala Ser Pro Glu Ala

130 135 140

Gly Met Ala Gly Pro Gly Gly Arg Arg Thr Thr Ser Leu Leu Lys Arg

145 150 155 160

Arg Gly Cys Gly Cys Cys Trp Arg Gly Glu Ala His Ser Pro Arg Thr

165 170 175

Ala Arg Thr Gly Arg Thr Arg Cys Gly Arg Ala Arg Arg Thr Pro Ala

180 185 190

Pro Arg Gln Val Ala Thr Ala Glu Glu Arg Asn Ser Pro Arg Val Leu

195 200 205

Ser Ser Leu Gly Phe Pro Thr Thr Ser Lys Ser Trp Lys Thr Gln Gly

210 215 220





&lt;210&gt; 2682

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2682

Met Ala Leu Arg Gly His Pro Glu Pro Gln Pro Thr Asn Thr Pro Leu

1 5 10 15

Ser Ala Thr Val Gly Gly Pro Ile Ser Leu Phe Thr Gln Pro Arg Cys

20 25 30

His Ser Ala Ala Arg Asp Leu Val Trp Ser Gln Ala Trp Pro Asp Pro

35 40 45

Asp Val Leu Glu Ile Ser Met Gln Thr Pro Gly Gly Ser Ser Cys Arg

50 55 60

Lys Glu Ala Val Leu Pro Arg Leu Arg Val Thr Arg Pro Leu Val Pro

65 70 75 80

Glu Pro Ala Ile Leu Pro Val Cys Ala Ala Arg Leu Ala Gly Ser Leu

85 90 95

Ala Thr Asp Leu Ser Arg Ser His Ser Leu Leu Pro Pro Trp Val Asp

100 105 110

Leu Lys Glu Pro Pro Pro Pro Ser Ala Pro Ser Leu Leu Leu Glu Asp

115 120 125

Pro Gly Gln Gly Gly Cys His Gly Ala Gln Ser Cys Val Gly Thr Cys

130 135 140

Glu Leu Ala Asn Gly Ala Arg Gly Phe Cys Pro Glu Met Gly Gln Asn

145 150 155 160

Glu Ser Leu Ser Glu Glu Arg Lys Gly His Glu Ser Lys Arg Lys Ser

165 170 175

Gly Gly Arg Gly Ser Pro Ser Ser His Pro Thr Gln Ala Ser  
 180 185 190

<210> 2683

<211> 354

<212> PRT

<213> Homo sapiens

<400> 2683

Met Val Gly Lys Tyr Phe Ser Arg Arg Lys Ala Leu Ala Tyr Gly Ile  
 1 5 10 15  
 Ala Met Ser Gly Ser Gly Ile Gly Thr Phe Ile Leu Ala Pro Val Val  
 20 25 30  
 Gln Leu Leu Ile Glu Gln Phe Ser Trp Arg Gly Ala Leu Leu Ile Leu  
 35 40 45  
 Gly Gly Phe Val Leu Asn Leu Cys Val Cys Gly Ala Leu Met Arg Pro  
 50 55 60  
 Ile Thr Leu Lys Glu Asp His Thr Thr Pro Glu Gln Asn His Val Cys  
 65 70 75 80  
 Arg Thr Gln Lys Glu Asp Ile Lys Arg Val Ser Pro Tyr Ser Ser Leu  
 85 90 95  
 Thr Lys Glu Trp Ala Gln Thr Cys Leu Cys Cys Cys Leu Gln Gln Glu  
 100 105 110  
 Tyr Ser Phe Leu Leu Met Ser Asp Phe Val Val Leu Ala Val Ser Val  
 115 120 125  
 Leu Phe Met Ala Tyr Gly Cys Ser Pro Leu Phe Val Tyr Leu Val Pro  
 130 135 140  
 Tyr Ala Leu Ser Val Gly Val Ser His Gln Gln Ala Ala Phe Leu Met

145                      150                      155                      160  
Ser Ile Leu Gly Val Ile Asp Ile Ile Gly Asn Ile Thr Phe Gly Trp  
                         165                      170                      175  
Leu Thr Asp Arg Arg Cys Leu Lys Asn Tyr Gln Tyr Val Cys Tyr Leu  
                         180                      185                      190  
Phe Ala Val Gly Met Asp Gly Leu Ser Tyr Leu Cys Leu Pro Met Leu  
                         195                      200                      205  
Gln Ser Leu Pro Leu Leu Val Pro Phe Ser Cys Thr Phe Gly Tyr Phe  
                         210                      215                      220  
Asp Gly Ala Tyr Val Thr Leu Ile Pro Val Val Thr Thr Glu Ile Val  
225                      230                      235                      240  
Gly Thr Thr Ser Leu Ser Ser Ala Leu Gly Val Val Tyr Phe Leu His  
                         245                      250                      255  
Ala Val Pro Tyr Leu Val Ser Pro Pro Ile Ala Gly Arg Leu Val Asp  
                         260                      265                      270  
Thr Thr Gly Ser Tyr Thr Ala Ala Phe Leu Leu Cys Gly Phe Ser Met  
                         275                      280                      285  
Ile Phe Ser Ser Val Leu Leu Gly Phe Ala Arg Leu Ile Lys Arg Met  
                         290                      295                      300  
Arg Lys Thr Gln Leu Gln Phe Ile Ala Lys Glu Ser Asp Pro Lys Leu  
305                      310                      315                      320  
Gln Leu Trp Thr Asn Gly Ser Val Ala Tyr Ser Val Ala Arg Glu Leu  
                         325                      330                      335  
Asp Gln Lys His Gly Glu Pro Val Ala Thr Ala Val Pro Gly Tyr Ser  
                         340                      345                      350  
Leu Thr

&lt;210&gt; 2684

&lt;211&gt; 1168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2684

Met His Ile Val Lys Gly Lys Leu Glu Asn Val Arg Val Met Leu Val

1 5 10 15

Pro Ser Pro Arg Tyr Val Gly Leu Gln Asn Asp Glu Pro Pro Arg Leu

20 25 30

Met Gly Glu Gly Phe Val Val Met Gln Ser Asn Asp Val Asp Ile Tyr

35 40 45

Tyr Tyr Met Asp Glu Pro Gly Leu Val Pro Glu Glu Thr Glu Glu Asn

50 55 60

Ile Glu Gly Glu Met Ser Ser Glu Asp Cys Lys Leu Gln Asp Leu Pro

65 70 75 80

Pro Cys Trp Gly Leu Asp Ile Val Cys Gly Lys Gly Thr Asp Phe Asn

85 90 95

Tyr Gly Pro Trp Ala Asp Arg Gln Arg Asp Cys Leu Trp Lys Phe Phe

100 105 110

Phe Pro Pro Asp Tyr Gln Val Leu Lys Val Ser Glu Ile Ala Gln Pro

115 120 125

Gly Arg Pro Arg Gln Ile Leu Ala Phe Glu Leu Arg Met Asn Ile Ile

130 135 140

Ala Asp Ala Thr Ile Asp Leu Leu Phe Thr Lys Asn Arg Glu Thr Asn

145 150 155 160

Ala Val His Val Asn Val Gly Ala Gly Ser Tyr Leu Glu Ile Asn Ile

165 170 175

Pro Met Thr Val Glu Glu Asn Gly Tyr Thr Pro Ala Ile Lys Gly Gln

180	185	190
Leu Leu His Val Asp Ala Thr Thr Ser Met Gln Tyr Arg Thr Leu Leu		
195	200	205
Glu Ala Glu Met Leu Ala Phe His Ile Asn Ala Ser Tyr Pro Arg Ile		
210	215	220
Trp Asn Met Pro Gln Thr Trp Gln Cys Glu Leu Glu Val Tyr Lys Ala		
225	230	235
Thr Tyr His Phe Ile Phe Ala Gln Lys Asn Phe Phe Thr Asp Leu Ile		
245	250	255
Gln Asp Trp Ser Ser Asp Ser Pro Pro Asp Ile Phe Ser Phe Val Pro		
260	265	270
Tyr Thr Trp Asn Phe Lys Ile Met Phe His Gln Phe Glu Met Ile Trp		
275	280	285
Ala Ala Asn Gln His Asn Trp Ile Asp Cys Ser Thr Lys Gln Gln Glu		
290	295	300
Asn Val Tyr Leu Ala Ala Cys Gly Glu Thr Leu Asn Ile Asp Phe Ser		
305	310	315
Leu Pro Phe Thr Asp Phe Val Pro Ala Thr Cys Asn Thr Lys Phe Ser		
325	330	335
Leu Arg Gly Glu Asp Val Asp Leu His Leu Phe Leu Pro Asp Cys His		
340	345	350
Pro Ser Lys Tyr Ser Leu Phe Met Leu Val Lys Asn Cys His Pro Asn		
355	360	365
Lys Met Ile His Asp Thr Gly Ile Pro Ala Glu Cys Gln Ser Gly Gln		
370	375	380
Lys Thr Val Lys Pro Lys Trp Arg Asn Val Thr Gln Glu Lys Ser Gly		
385	390	395
Trp Val Glu Cys Trp Thr Val Pro Ser Val Met Leu Thr Ile Asp Tyr		
405	410	415

Thr Trp His Pro Ile Tyr Pro Gln Lys Ala Asp Glu Gln Leu Lys Gln  
420 425 430  
Ser Leu Ser Glu Met Glu Glu Thr Met Leu Ser Val Leu Arg Pro Ser  
435 440 445  
Gln Lys Thr Ser Asp Arg Val Val Ser Ser Pro Ser Thr Ser Ser Arg  
450 455 460  
Pro Pro Ile Asp Pro Ser Glu Leu Pro Pro Asp Lys Leu His Val Glu  
465 470 475 480  
Met Glu Leu Ser Pro Asp Ser Gln Ile Thr Leu Tyr Gly Pro Leu Leu  
485 490 495  
Asn Ala Phe Leu Cys Ile Lys Glu Asn Tyr Phe Gly Glu Asp Asp Met  
500 505 510  
Tyr Met Asp Phe Glu Glu Val Ile Ser Ser Pro Val Leu Ser Leu Ser  
515 520 525  
Thr Ser Ser Ser Ser Gly Trp Thr Ala Val Gly Met Glu Asn Asp Lys  
530 535 540  
Lys Glu Asn Glu Gly Ser Ala Lys Ser Ile His Pro Leu Ala Leu Arg  
545 550 555 560  
Pro Trp Asp Ile Thr Val Leu Val Asn Leu Tyr Lys Val His Gly Arg  
565 570 575  
Leu Pro Val His Gly Thr Thr Asp Gly Pro Glu Cys Pro Thr Ala Phe  
580 585 590  
Leu Glu Arg Leu Cys Phe Glu Met Lys Lys Gly Phe Arg Glu Thr Met  
595 600 605  
Leu Gln Pro Ile Leu Ser Pro Leu Asn Val Phe Val Ser Asp Asn Tyr  
610 615 620  
Gln Arg Pro Pro Val Asp Glu Val Leu Arg Glu Gly His Ile Asn Leu  
625 630 635 640  
Ser Gly Leu Gln Leu Arg Ala His Ala Met Phe Ser Ala Glu Gly Leu

645	650	655
Pro Leu Gly Ser Asp Ser Leu Glu Tyr Ala Trp Leu Ile Asp Val Gln		
660	665	670
Ala Gly Ser Leu Thr Ala Lys Val Thr Ala Pro Gln Leu Ala Cys Leu		
675	680	685
Leu Glu Trp Gly Gln Thr Phe Val Phe His Val Val Cys Arg Glu Tyr		
690	695	700
Glu Leu Glu Arg Pro Lys Ser Val Ile Ile Cys Gln His Gly Ile Asp		
705	710	715
720	725	730
Arg Arg Phe Cys Glu Ser Lys Leu Ser Cys Ile Pro Gly Pro Cys Pro		
735	740	745
Thr Ser Asp Asp Leu Lys Tyr Thr Met Ile Arg Leu Ala Val Asp Gly		
750	755	760
Ala Asp Ile Tyr Ile Val Glu His Gly Cys Ala Thr Asn Ile Lys Met		
765	770	775
Gly Ala Ile Arg Val Ala Asn Cys Asn Leu His Asn Gln Ser Val Gly		
780	785	790
Glu Gly Ile Ser Ala Ala Ile Gln Asp Phe Gln Val Arg Gln Tyr Ile		
795	800	805
Glu Gln Leu Asn Asn Cys Arg Ile Gly Leu Gln Pro Ala Val Leu Arg		
810	815	820
Arg Ala Tyr Trp Leu Glu Ala Gly Ser Ala Asn Leu Gly Leu Ile Thr		
825	830	835
Val Asp Ile Ala Leu Ala Ala Asp His His Ser Lys His Glu Ala Gln		
840	845	850
Arg His Phe Leu Glu Thr His Asp Ala Arg Thr Lys Arg Leu Trp Phe		
855	860	865
Leu Trp Pro Asp Asp Ile Leu Lys Asn Lys Arg Cys Arg Asn Lys Cys		
870	875	880

Gly Cys Leu Gly Gly Cys Arg Phe Phe Gly Gly Thr Val Thr Gly Leu  
 885 890 895  
 Asp Phe Phe Lys Leu Glu Glu Leu Thr Pro Ser Ser Ser Ser Ala Phe  
 900 905 910  
 Ser Ser Thr Ser Ala Glu Ser Asp Met Tyr Tyr Gly Gln Ser Leu Leu  
 915 920 925  
 Gln Pro Gly Glu Trp Ile Ile Thr Lys Glu Ile Pro Lys Ile Ile Asp  
 930 935 940  
 Gly Asn Val Asn Gly Met Lys Arg Lys Glu Trp Glu Asn Lys Ser Val  
 945 950 955 960  
 Gly Ile Glu Val Glu Arg Lys Thr Gln His Leu Ser Leu Gln Val Pro  
 965 970 975  
 Leu Arg Ser His Ser Ser Ser Ser Ser Ser Ser Glu Glu Asn Ser Ser Ser  
 980 985 990  
 Ser Ala Ala Gln Pro Leu Leu Ala Gly Glu Lys Glu Ser Pro Ser Ser  
 995 1000 1005  
 Val Ala Asp Asp His Leu Val Gln Lys Glu Phe Leu His Gly Thr Lys  
 1010 1015 1020  
 Arg Asp Asp Gly Gln Ala Ser Ile Pro Thr Glu Ile Ser Gly Asn Ser  
 1025 1030 1035 1040  
 Pro Val Ser Pro Asn Thr Gln Asp Lys Ser Val Gly Gln Ser Pro Leu  
 1045 1050 1055  
 Arg Ser Pro Leu Lys Arg Gln Ala Ser Val Cys Ser Thr Arg Leu Gly  
 1060 1065 1070  
 Ser Thr Lys Ser Leu Thr Ala Ala Phe Tyr Gly Asp Lys Gln Pro Val  
 1075 1080 1085  
 Thr Val Gly Val Gln Phe Ser Ser Asp Val Ser Arg Ser Asp Glu Asn  
 1090 1095 1100  
 Val Leu Asp Ser Pro Lys Gln Arg Arg Ser Phe Gly Ser Phe Pro Tyr



1105                      1110                      1115                      1120  
 Thr Pro Ser Ala Asp Ser Asn Ser Phe His Gln Tyr Arg Ser Met Asp  
                          1125                      1130                      1135  
 Ser Ser Met Ser Met Ala Asp Ser Glu Ala Tyr Phe Ser Ala Ala Glu  
                          1140                      1145                      1150  
 Glu Phe Glu Pro Ile Ser Ser Asp Glu Gly Pro Gly Thr Tyr Pro Gly  
                          1155                      1160                      1165

<210> 2685

<211> 778

<212> PRT

<213> Homo sapiens

<400> 2685

Met Ser Leu Thr Gln Lys Gly Asp Gly Glu Ser Gln Pro Gln Phe Pro  
   1                      5                      10                      15  
 Ala Val Pro Leu Glu Pro Leu Pro Thr Thr Glu Gly Thr Pro Gly Leu  
                          20                      25                      30  
 Pro Leu Gln Gln Ala Glu Glu Arg Tyr Glu Ser Gln Glu Pro Leu Ala  
                          35                      40                      45  
 Gly Gln Glu Ser Pro Leu Pro Leu Ala Thr Arg Glu Ala Ala Leu Pro  
                          50                      55                      60  
 Ile Leu Glu Pro Val Leu Gly Gln Glu Gln Pro Ala Ala Pro Asp Gln  
                          65                      70                      75                      80  
 Pro Cys Val Leu Phe Ala Asp Ala Pro Glu Pro Gly Gln Ala Leu Pro  
                          85                      90                      95  
 Val Glu Glu Glu Ala Val Thr Leu Ala Arg Ala Glu Thr Thr Gln Ala  
                          100                      105                      110

Arg Thr Glu Ala Gln Asp Leu Cys Arg Ala Ser Pro Glu Pro Pro Gly  
 115 120 125  
 Pro Glu Ser Ser Ser Arg Trp Leu Asp Asp Leu Leu Ala Ser Pro Pro  
 130 135 140  
 Pro Ser Gly Gly Gly Ala Arg Arg Gly Ala Gly Ala Glu Leu Lys Asp  
 145 150 155 160  
 Thr Gln Ser Pro Ser Thr Cys Ser Glu Gly Leu Leu Gly Trp Ser Gln  
 165 170 175  
 Lys Asp Leu Gln Ser Glu Phe Gly Ile Thr Gly Asp Pro Gln Pro Ser  
 180 185 190  
 Ser Phe Ser Pro Ser Ser Trp Cys Gln Gly Ala Ser Gln Asp Tyr Gly  
 195 200 205  
 Leu Gly Gly Ala Ser Pro Arg Gly Asp Pro Gly Leu Gly Glu Arg Asp  
 210 215 220  
 Trp Thr Ser Lys Tyr Gly Gln Gly Ala Gly Glu Gly Ser Thr Arg Glu  
 225 230 235 240  
 Trp Ala Ser Arg Cys Gly Ile Gly Gln Glu Glu Met Glu Ala Ser Ser  
 245 250 255  
 Ser Gln Asp Gln Ser Lys Val Ser Ala Pro Gly Val Leu Thr Ala Gln  
 260 265 270  
 Asp Arg Val Val Gly Lys Pro Ala Gln Leu Gly Thr Gln Arg Ser Gln  
 275 280 285  
 Glu Ala Asp Val Gln Asp Trp Glu Phe Arg Lys Arg Asp Ser Gln Gly  
 290 295 300  
 Thr Tyr Ser Ser Arg Asp Ala Glu Leu Gln Asp Gln Glu Phe Gly Lys  
 305 310 315 320  
 Arg Asp Ser Leu Gly Thr Tyr Ser Ser Arg Asp Val Ser Leu Gly Asp  
 325 330 335  
 Trp Glu Phe Gly Lys Arg Asp Ser Leu Gly Ala Tyr Ala Ser Gln Asp

340 345 350  
Ala Asn Glu Gln Gly Gln Asp Leu Gly Lys Arg Asp His His Gly Arg  
355 360 365  
Tyr Ser Ser Gln Asp Ala Asp Glu Gln Asp Trp Glu Phe Gln Lys Arg  
370 375 380  
Asp Val Ser Leu Gly Thr Tyr Gly Ser Arg Ala Ala Glu Pro Gln Glu  
385 390 395 400  
Gln Glu Phe Gly Lys Ser Ala Trp Ile Arg Asp Tyr Ser Ser Gly Gly  
405 410 415  
Ser Ser Arg Thr Leu Asp Ala Gln Asp Arg Ser Phe Gly Thr Arg Pro  
420 425 430  
Leu Ser Ser Gly Phe Ser Pro Glu Glu Ala Gln Gln Gln Asp Glu Glu  
435 440 445  
Phe Glu Lys Lys Ile Pro Ser Val Glu Asp Ser Leu Gly Glu Gly Ser  
450 455 460  
Arg Asp Ala Gly Arg Pro Gly Glu Arg Gly Ser Gly Gly Leu Phe Ser  
465 470 475 480  
Pro Ser Thr Ala His Val Pro Asp Gly Ala Leu Gly Gln Arg Asp Gln  
485 490 495  
Ser Ser Trp Gln Asn Ser Asp Ala Ser Gln Glu Val Gly Gly His Gln  
500 505 510  
Glu Arg Gln Gln Ala Gly Ala Gln Gly Pro Gly Ser Ala Asp Leu Glu  
515 520 525  
Asp Gly Glu Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser  
530 535 540  
Val Gly Pro Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp  
545 550 555 560  
Ser Arg Asp Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly  
565 570 575

Ile Ile Gly Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser  
580 585 590  
Lys Met Glu Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly  
595 600 605  
Ser Val Asp Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser  
610 615 620  
Ser Cys Val Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val  
625 630 635 640  
Gly Gln Met Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu  
645 650 655  
Thr Gly Cys Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly  
660 665 670  
Val Gly Glu Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp  
675 680 685  
Leu Ala Glu Val Gly Glu Gly Gly Gly His Ser Gln Ala Arg Glu Ser  
690 695 700  
Gly Val Gly Gln Thr Asp Trp Ser Gly Val Glu Ala Gly Glu Phe Leu  
705 710 715 720  
Lys Ser Arg Glu Arg Leu Gly Arg His Ile Tyr Ala Leu Cys Ile Thr  
725 730 735  
Leu Arg Thr Pro Pro Thr Pro Ser Leu Pro Trp Ile Ser Ser Leu Val  
740 745 750  
Val Glu Gly Phe Val Pro Ser Ser Pro Pro Ser Leu Ser Leu Ser Ala  
755 760 765  
Ser Ser Ser Ser Leu Pro Trp Val Phe Phe  
770 775

&lt;210&gt; 2686

&lt;211&gt; 1430

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2686

Met Thr Ser Ala Ala Glu Ile Lys Lys Pro Pro Val Ala Pro Lys Pro

1 5 10 15

Lys Phe Val Val Ala Asn Asn Lys Pro Ala Pro Pro Pro Ile Ala Pro

20 25 30

Lys Pro Asp Ile Val Ile Ser Ser Val Pro Gln Ser Thr Lys Lys Met

35 40 45

Lys Pro Ala Ile Ala Pro Lys Pro Lys Val Leu Lys Thr Ser Pro Val

50 55 60

Arg Glu Ile Gly Gln Ser Pro Ser Arg Lys Ile Met Leu Asn Leu Glu

65 70 75 80

Gly His Lys Gln Glu Leu Ala Glu Ser Thr Asp Asn Phe Asn Cys Lys

85 90 95

Tyr Glu Gly Asn Gln Ser Asn Asp Tyr Ile Ser Pro Met Cys Ser Cys

100 105 110

Ser Ser Glu Cys Ile His Lys Leu Gly His Arg Glu Asn Leu Cys Val

115 120 125

Lys Gln Leu Val Leu Glu Pro Leu Glu Met Asn Glu Asn Leu Glu Asn

130 135 140

Ser Lys Ile Asp Glu Thr Leu Thr Ile Lys Thr Arg Ser Lys Cys Asp

145 150 155 160

Leu Tyr Gly Glu Lys Ala Lys Asn Gln Gly Gly Val Val Leu Lys Ala

165 170 175

Ser Val Leu Glu Glu Glu Leu Lys Asp Ala Leu Ile His Gln Met Pro

180 185 190

Pro Phe Ile Ser Ala Gln Lys His Arg Pro Thr Asp Ser Pro Glu Met  
 195 200 205  
 Asn Gly Gly Cys Asn Ser Asn Gly Gln Phe Arg Ile Glu Phe Ala Asp  
 210 215 220  
 Leu Ser Pro Ser Pro Ser Ser Phe Glu Lys Val Pro Asp His His Ser  
 225 230 235 240  
 Cys His Leu Gln Leu Pro Ser Asp Glu Cys Glu His Phe Glu Thr Cys  
 245 250 255  
 Gln Asp Asp Ser Glu Lys Ser Asn Asn Cys Phe Gln Ser Ser Glu Leu  
 260 265 270  
 Glu Ala Leu Glu Asn Gly Lys Arg Ser Thr Leu Ile Ser Ser Asp Gly  
 275 280 285  
 Val Ser Lys Lys Ser Glu Val Lys Asp Leu Gly Pro Leu Glu Ile His  
 290 295 300  
 Leu Val Pro Tyr Thr Pro Lys Phe Pro Thr Pro Lys Pro Arg Lys Thr  
 305 310 315 320  
 Arg Thr Ala Arg Leu Leu Arg Gln Lys Cys Val Asp Thr Pro Ser Glu  
 325 330 335  
 Ser Thr Glu Glu Pro Gly Asn Ser Asp Ser Ser Ser Ser Cys Leu Thr  
 340 345 350  
 Glu Asn Ser Leu Lys Ile Asn Lys Ile Ser Val Leu His Gln Asn Val  
 355 360 365  
 Leu Cys Lys Gln Glu Gln Val Asp Lys Met Lys Leu Gly Asn Lys Ser  
 370 375 380  
 Glu Leu Asn Met Glu Ser Asn Ser Asp Ala Gln Asp Leu Val Asn Ser  
 385 390 395 400  
 Gln Lys Ala Met Cys Asn Glu Thr Thr Ser Phe Glu Lys Met Ala Pro  
 405 410 415  
 Ser Phe Asp Lys Asp Ser Asn Leu Ser Ser Asp Ser Thr Thr Val Asp

420 425 430  
Gly Ser Ser Met Ser Leu Ala Val Asp Glu Gly Thr Gly Phe Ile Arg  
435 440 445  
Cys Thr Val Ser Met Ser Leu Pro Lys Gln Leu Lys Leu Thr Cys Asn  
450 455 460  
Glu His Leu Gln Ser Gly Arg Asn Leu Gly Val Ser Ala Pro Gln Met  
465 470 475 480  
Gln Lys Glu Ser Val Ile Lys Glu Glu Asn Ser Leu Arg Ile Val Pro  
485 490 495  
Lys Lys Pro Gln Arg His Ser Leu Pro Ala Thr Gly Val Leu Lys Lys  
500 505 510  
Ala Ala Ser Glu Glu Leu Leu Glu Lys Ser Ser Tyr Pro Ser Ser Glu  
515 520 525  
Glu Lys Ser Ser Glu Lys Ser Leu Glu Arg Asn His Leu Gln His Leu  
530 535 540  
Cys Ala Gln Asn Arg Gly Val Ser Ser Ser Phe Asp Met Pro Lys Arg  
545 550 555 560  
Ala Ser Glu Lys Pro Val Trp Lys Leu Pro His Pro Ile Leu Pro Phe  
565 570 575  
Ser Gly Asn Pro Glu Phe Leu Lys Ser Val Thr Val Ser Ser Asn Ser  
580 585 590  
Glu Pro Ser Thr Ala Leu Thr Lys Pro Arg Ala Lys Ser Leu Ser Ala  
595 600 605  
Met Asp Val Glu Lys Cys Thr Lys Pro Cys Lys Asp Ser Thr Lys Lys  
610 615 620  
Asn Ser Phe Lys Lys Leu Leu Ser Met Lys Leu Ser Ile Cys Phe Met  
625 630 635 640  
Lys Ser Asp Phe Gln Lys Phe Trp Ser Lys Ser Ser Gln Leu Gly Asp  
645 650 655

Thr Thr Thr Gly His Leu Ser Ser Gly Glu Gln Lys Gly Ile Glu Ser  
660 665 670  
Asp Trp Gln Gly Leu Leu Val Gly Glu Glu Lys Arg Ser Lys Pro Ile  
675 680 685  
Lys Ala Tyr Ser Thr Glu Asn Tyr Ser Leu Glu Ser Gln Lys Lys Arg  
690 695 700  
Lys Lys Ser Arg Gly Gln Thr Ser Ala Ala Asn Gly Leu Arg Ala Glu  
705 710 715 720  
Ser Leu Asp Asp Gln Met Leu Ser Arg Glu Ser Ser Ser Gln Ala Pro  
725 730 735  
Tyr Lys Ser Val Thr Ser Leu Cys Ala Pro Glu Tyr Glu Asn Ile Arg  
740 745 750  
His Tyr Glu Glu Ile Pro Glu Tyr Glu Asn Leu Pro Phe Ile Met Ala  
755 760 765  
Ile Arg Lys Thr Gln Glu Leu Glu Trp Gln Asn Ser Ser Ser Met Glu  
770 775 780  
Asp Ala Asp Ala Asn Val Tyr Glu Val Glu Glu Pro Tyr Glu Ala Pro  
785 790 795 800  
Asp Gly Gln Leu Gln Leu Gly Pro Arg His Gln His Ser Ser Ser Gly  
805 810 815  
Ala Ser Gln Glu Glu Gln Asn Asp Leu Gly Leu Gly Asp Leu Pro Ser  
820 825 830  
Asp Glu Glu Glu Ile Ile Asn Ser Ser Asp Glu Asp Asp Val Ser Ser  
835 840 845  
Glu Ser Ser Lys Gly Glu Pro Asp Pro Leu Glu Asp Lys Gln Asp Glu  
850 855 860  
Asp Asn Gly Met Lys Ser Lys Val His His Ile Ala Lys Glu Ile Met  
865 870 875 880  
Ser Ser Glu Lys Val Phe Val Asp Val Leu Lys Leu Leu His Ile Asp



885	890	895
Phe Arg Asp Ala Val Ala His Ala Ser Arg Gln Leu Gly Lys Pro Val		
900	905	910
Ile Glu Asp Arg Ile Leu Asn Gln Ile Leu Tyr Tyr Leu Pro Gln Leu		
915	920	925
Tyr Glu Leu Asn Arg Asp Leu Leu Lys Glu Leu Glu Glu Arg Met Leu		
930	935	940
His Trp Thr Glu His Gln Arg Ile Ala Asp Ile Phe Val Lys Lys Gly		
945	950	955
960		
Pro Tyr Leu Lys Met Tyr Ser Thr Tyr Ile Lys Glu Phe Asp Lys Asn		
965	970	975
Ile Ala Leu Leu Asp Glu Gln Cys Lys Lys Asn Pro Gly Phe Ala Ala		
980	985	990
Val Val Arg Glu Phe Glu Met Ser Pro Arg Cys Ala Asn Leu Ala Leu		
995	1000	1005
Lys His Tyr Leu Leu Lys Pro Val Gln Arg Ile Pro Gln Tyr Arg Leu		
1010	1015	1020
Leu Leu Thr Asp Tyr Leu Lys Asn Leu Ile Glu Asp Ala Gly Asp Tyr		
1025	1030	1035
1040		
Arg Asp Thr Gln Asp Ala Leu Ala Val Val Ile Glu Val Ala Asn His		
1045	1050	1055
Ala Asn Asp Thr Met Lys Gln Gly Asp Asn Phe Gln Lys Leu Met Gln		
1060	1065	1070
Ile Gln Tyr Ser Leu Asn Gly His His Glu Ile Val Gln Pro Gly Arg		
1075	1080	1085
Val Phe Leu Lys Glu Gly Ile Leu Met Lys Leu Ser Arg Lys Val Met		
1090	1095	1100
Gln Pro Arg Met Phe Phe Leu Phe Asn Asp Ala Leu Leu Tyr Thr Thr		
1105	1110	1115
		1120

Pro Val Gln Ser Gly Met Tyr Lys Leu Asn Asn Met Leu Ser Leu Ala  
1125 1130 1135  
Gly Met Lys Val Arg Lys Pro Thr Gln Glu Ala Tyr Gln Asn Glu Leu  
1140 1145 1150  
Lys Ile Glu Ser Val Glu Arg Ser Phe Ile Leu Ser Ala Ser Ser Ala  
1155 1160 1165  
Thr Glu Arg Asp Glu Trp Leu Glu Ala Ile Ser Arg Ala Ile Glu Glu  
1170 1175 1180  
Tyr Ala Lys Lys Arg Ile Thr Phe Cys Pro Ser Arg Ser Leu Asp Glu  
1185 1190 1195 1200  
Ala Asp Ser Glu Asn Lys Glu Glu Val Ser Pro Leu Gly Ser Lys Ala  
1205 1210 1215  
Pro Ile Trp Ile Pro Asp Thr Arg Ala Thr Met Cys Met Ile Cys Thr  
1220 1225 1230  
Ser Glu Phe Thr Leu Thr Trp Arg Arg His His Cys Arg Ala Cys Gly  
1235 1240 1245  
Lys Ile Val Cys Gln Ala Cys Ser Ser Asn Lys Tyr Gly Leu Asp Tyr  
1250 1255 1260  
Leu Lys Asn Gln Pro Ala Arg Val Cys Glu His Cys Phe Gln Glu Leu  
1265 1270 1275 1280  
Gln Lys Leu Asp His Gln His Ser Pro Arg Ile Gly Ser Pro Gly Asn  
1285 1290 1295  
His Lys Ser Pro Ser Ser Ala Leu Ser Ser Val Leu His Ser Ile Pro  
1300 1305 1310  
Ser Gly Arg Lys Gln Lys Lys Ile Pro Ala Ala Leu Lys Glu Val Ser  
1315 1320 1325  
Ala Asn Thr Glu Asp Ser Ser Met Ser Gly Tyr Leu Tyr Arg Ser Lys  
1330 1335 1340  
Gly Asn Lys Lys Pro Trp Lys His Phe Trp Phe Val Ile Lys Asn Lys

1345                      1350                      1355                      1360  
 Val Leu Tyr Thr Tyr Ala Ala Ser Glu Asp Val Ala Ala Leu Glu Ser  
                          1365                      1370                      1375  
 Gln Pro Leu Leu Gly Phe Thr Val Ile Gln Val Lys Asp Glu Asn Ser  
                          1380                      1385                      1390  
 Glu Ser Lys Val Phe Gln Leu Leu His Lys Asn Met Leu Phe Tyr Val  
                          1395                      1400                      1405  
 Phe Lys Ala Glu Asp Ala His Ser Ala Gln Lys Trp Ile Glu Ala Phe  
                          1410                      1415                      1420  
 Gln Glu Gly Thr Ile Leu  
 1425                      1430

<210> 2687

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2687

Met His Thr Ser Gln Leu Glu Leu Glu His Leu Phe Leu Ser Cys Ser  
                          1                      5                      10                      15  
 Arg Trp Pro Gly His Thr Val Leu Phe Pro Ala Pro Ser Phe Leu Phe  
                          20                      25                      30  
 Ser Phe Gln Thr Ser Leu Pro Gln Met Phe Ala Ile Pro His Leu Ser  
                          35                      40                      45  
 Leu Gln Ile Leu Pro Ile Leu Ser Phe His Thr Ser Pro Met Pro Leu  
                          50                      55                      60  
 Lys Met Pro Phe Met Phe Leu Ser Leu Pro Arg Asp Thr Phe Leu Met  
                          65                      70                      75                      80

Leu Glu Leu Val Leu Gly Thr Phe Thr Cys Asn Gly Ser Phe Phe Ile

85

90

95

His Lys Ala Ser

100

<210> 2688

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2688

Met Trp Lys Leu Pro Arg Leu Gly Ala Tyr Thr Phe Arg Ser Asn Ser

1

5

10

15

Leu Ser Tyr Thr Leu Ala Pro Phe Ser Tyr Ser Trp Ser Gly Trp Asp

20

25

30

Ala Gly His Gln Val Pro Arg Leu Tyr Thr Ala Gly Ser Pro Val Pro

35

40

45

Cys Pro Arg Asn Arg Phe Ser Leu Leu Asp Leu Trp Ala Cys Asp Gly

50

55

60

Arg Gly Tyr Arg Gln Asp Leu Cys His Ala Leu Lys Thr Phe Ser Pro

65

70

75

80

Leu Ser Trp Leu Leu Leu Thr Ser Ala Asn Phe Cys Ser Trp Leu Glu

85

90

95

Phe Leu Pro Arg Lys Trp Val Phe Leu Phe Tyr Ser Ile Ile Arg Leu

100

105

110

Gln Ile Phe Gln Thr Phe Leu Leu Cys Phe Pro Phe Lys His Asn Phe

115

120

125

&lt;210&gt; 2689

&lt;211&gt; 470

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

Met Thr Pro Ser Leu Ser Val Cys Ser Ala Thr Asn Thr Arg Arg Cys

1 5 10 15

Pro Ser Leu Trp Ala Pro Ala Ala Val Pro Ala Asp Gly Ala Val Leu

20 25 30

Tyr Ser Leu Ile Cys Ala Ala Pro Ala Ala Cys Arg His Cys Ala Trp

35 40 45

His Arg Gly Cys Asn Arg Thr Gln Thr Asp Ala Cys Leu Pro Trp Pro

50 55 60

Gly Ser Cys Ser Ala Gly Gly Val Arg Gly Gln His Ala Val Glu Glu

65 70 75 80

Arg Thr Ala Asp Gly Val His Arg Gln Ala Val Val Leu Tyr Gly Ala

85 90 95

Ile Arg Glu Ala Pro Gln Arg Arg Glu His Arg Pro Ala Gly Asn Glu

100 105 110

Val Trp Ser Gly Gln Gln Glu Gly Gln Ser Arg Gly Gln Trp Gly Thr

115 120 125

Gly Leu Val Cys Thr Gly Gln Lys Gly Lys Ala Gly Gly Arg Val Lys

130 135 140

Pro Gln Gly Val Gly Gly Ser Gly Glu Ala Leu Ala Gly Ser Cys Phe

145 150 155 160

Leu Gln Gln Ser Met Leu Trp Ala Tyr Pro Gly Pro Cys His Leu Gly

165 170 175

Ser Gln Cys Pro Tyr Leu Pro Trp Arg Asp Arg Pro His Gln Pro Ser  
 180 185 190  
 Val Pro Cys Ser Cys Ala Ile Ser Asn Val Lys Lys Val Ser Leu Glu  
 195 200 205  
 Leu Gly Gly Lys Ser Pro Leu Ile Ile Phe Ala Asp Cys Asp Leu Asn  
 210 215 220  
 Lys Ala Val Gln Met Gly Met Ser Ser Val Phe Phe Asn Lys Gly Glu  
 225 230 235 240  
 Asn Cys Ile Ala Ala Gly Arg Leu Phe Val Glu Asp Ser Ile His Asp  
 245 250 255  
 Glu Phe Val Arg Arg Val Val Glu Glu Val Arg Lys Met Lys Val Gly  
 260 265 270  
 Asn Pro Leu Asp Arg Asp Thr Asp His Gly Pro Gln Asn His His Ala  
 275 280 285  
 His Leu Val Lys Leu Met Glu Tyr Cys Gln His Gly Val Lys Glu Gly  
 290 295 300  
 Ala Thr Leu Val Cys Gly Gly Asn Gln Val Pro Arg Pro Gly Phe Phe  
 305 310 315 320  
 Phe Glu Pro Thr Val Phe Thr Asp Val Glu Asp His Met Phe Ile Ala  
 325 330 335  
 Lys Glu Glu Ser Phe Gly Pro Val Met Ile Ile Ser Arg Phe Ala Asp  
 340 345 350  
 Gly Asp Leu Asp Ala Val Leu Ser Arg Ala Asn Ala Thr Glu Phe Gly  
 355 360 365  
 Leu Ala Ser Gly Val Phe Thr Arg Asp Ile Asn Lys Ala Leu Tyr Val  
 370 375 380  
 Ser Asp Lys Leu Gln Ala Gly Thr Val Phe Val Asn Thr Tyr Asn Lys  
 385 390 395 400  
 Thr Asp Val Ala Ala Pro Phe Gly Gly Phe Glu Gln Ser Gly Phe Gly

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Tyr Ala Ser Glu Arg Asn Gly Val Asn Val Ile Ser Gly Pro Ile Phe  
 100 105 110  
 Asp Tyr Asp Tyr Asp Gly Leu His Val Thr Glu Asp Lys Ile Lys Gln  
 115 120 125  
 Tyr Val Glu Gly Ser Ser Ile Pro Val Pro Thr His Tyr Tyr Ser Ile  
 130 135 140  
 Ile Thr Ser Cys Leu Asp Phe Thr Gln Pro Ala Asp Lys Cys Asp Gly  
 145 150 155 160  
 Pro Leu Ser Val Ser Ser Phe Ile Leu Pro His Arg Pro Asp Asn Glu  
 165 170 175  
 Glu Ser Cys Asn Ser Ser Glu Asp Glu Ser Lys Trp Val Glu Glu Leu  
 180 185 190  
 Met Lys Met His Thr Ala Arg Val Arg Asp Ile Glu His Leu Thr Ser  
 195 200 205  
 Leu Asp Phe Phe Arg Lys Thr Ser Arg Ser Tyr Pro Glu Ile Leu Thr  
 210 215 220  
 Leu Lys Thr Tyr Leu His Thr Tyr Glu Ser Glu Ile  
 225 230 235

&lt;210&gt; 2691

&lt;211&gt; 590

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2691

Met Val Ala Val Ser Ser Val Ser His Ala Glu Gly Asn Pro Thr Phe  
 1 5 10 15  
 Pro Glu Arg Lys Arg Asn Leu Glu Arg Pro Thr Pro Lys Tyr Thr Lys



20	25	30
Val Gly Glu Arg Leu Arg His	Val Ile Pro Gly His Met	Ala Cys Ser
35	40	45
Met Ala Cys Gly Gly Arg Ala Cys	Lys Tyr Glu Asn Pro	Ala Arg Trp
50	55	60
Ser Glu Gln Glu Gln Ala Ile Lys	Gly Val Tyr Ser Ser	Trp Val Thr
65	70	75
80		
Asp Asn Ile Leu Ala Met Ala Arg	Pro Ser Ser Glu Leu Leu	Glu Lys
85	90	95
Tyr His Ile Ile Asp Gln Phe Leu	Ser His Gly Ile Lys Thr	Ile Ile
100	105	110
Asn Leu Gln Arg Pro Gly Glu His	Ala Ser Cys Gly Asn Pro	Leu Glu
115	120	125
Gln Glu Ser Gly Phe Thr Tyr Leu	Pro Glu Ala Phe Met	Glu Ala Gly
130	135	140
Ile Tyr Phe Tyr Asn Leu Gly Trp	Lys Asp Tyr Gly Val	Ala Ser Leu
145	150	155
160		
Thr Thr Ile Leu Asp Met Val Lys	Val Met Thr Phe Ala	Leu Gln Glu
165	170	175
Gly Lys Val Ala Ile His Cys His	Ala Gly Leu Gly Arg Thr	Gly Val
180	185	190
Leu Ile Ala Cys Tyr Leu Val Phe	Ala Thr Arg Met Thr	Ala Asp Gln
195	200	205
Ala Ile Ile Phe Val Arg Ala Lys	Arg Pro Asn Ser Ile	Gln Thr Arg
210	215	220
Gly Gln Leu Leu Cys Val Arg Glu	Phe Thr Gln Phe Leu	Thr Pro Leu
225	230	235
240		
Arg Asn Ile Phe Ser Cys Cys Asp	Pro Lys Ala His Ala	Val Thr Leu
245	250	255

Pro Gln Tyr Leu Ile Arg Gln Arg His Leu Leu His Gly Tyr Glu Ala  
260 265 270  
Arg Leu Leu Lys His Val Pro Lys Ile Ile His Leu Val Cys Lys Leu  
275 280 285  
Leu Leu Asp Leu Ala Glu Asn Arg Pro Val Met Met Lys Asp Val Ser  
290 295 300  
Glu Gly Pro Gly Leu Ser Ala Glu Ile Glu Lys Thr Met Ser Glu Met  
305 310 315 320  
Val Thr Met Gln Leu Asp Lys Glu Leu Leu Arg His Asp Ser Asp Val  
325 330 335  
Ser Asn Pro Pro Asn Pro Thr Ala Val Ala Ala Asp Phe Asp Asn Arg  
340 345 350  
Gly Met Ile Phe Ser Asn Glu Gln Gln Phe Asp Pro Leu Trp Lys Arg  
355 360 365  
Arg Asn Val Glu Cys Leu Gln Pro Leu Thr His Leu Lys Arg Arg Leu  
370 375 380  
Ser Tyr Ser Asp Ser Asp Leu Lys Arg Ala Glu Asn Leu Leu Glu Gln  
385 390 395 400  
Gly Glu Thr Pro Gln Thr Val Pro Ala Gln Ile Leu Val Gly His Lys  
405 410 415  
Pro Arg Gln Gln Lys Leu Ile Ser His Cys Tyr Ile Pro Gln Ser Pro  
420 425 430  
Glu Pro Asp Leu His Lys Glu Ala Leu Val Arg Ser Thr Leu Ser Phe  
435 440 445  
Trp Ser Gln Ser Lys Phe Gly Gly Leu Glu Gly Leu Lys Asp Asn Gly  
450 455 460  
Ser Pro Ile Phe His Gly Arg Ile Ile Pro Lys Glu Ala Gln Gln Ser  
465 470 475 480  
Gly Ala Phe Ser Ala Asp Val Ser Gly Ser His Ser Pro Gly Glu Pro

	485		490		495
Val Ser Pro Ser Phe Ala Asn Val His Lys Asp Pro Asn Pro Ala His					
	500		505		510
Gln Gln Val Ser His Cys Gln Cys Lys Thr His Gly Val Gly Ser Pro					
	515		520		525
Gly Ser Val Arg Gln Asn Ser Arg Thr Pro Arg Ser Pro Leu Asp Cys					
	530		535		540
Gly Ser Ser Pro Lys Ala Gln Phe Leu Val Glu His Glu Thr Gln Asp					
545		550		555	560
Ser Lys Asp Leu Ser Glu Ala Ala Ser His Ser Ala Leu Gln Ser Glu					
	565		570		575
Leu Ser Ala Glu Ala Arg Arg Ile Leu Ala Ala Lys Ala Leu					
	580		585		590

&lt;210&gt; 2692

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2692

Met Val Ile Cys His Ala Pro Leu Glu Val Cys Gly Pro Phe Phe Phe			
1	5	10	15
Phe Leu Phe Phe Phe Ser Phe Gly Gly Gly Gly Thr Glu Ser Arg Ser			
	20	25	30
Val Thr Gln Ala Gly Val Gln Trp His Val Leu Gly Ser Leu Gln Pro			
	35	40	45
Leu Pro Pro Gly Phe Lys Gln Phe Phe Cys Leu Ile Leu Leu Ser Ser			
	50	55	60

Trp Asp Tyr Arg Cys Met Pro Pro His Leu Ala Asn Phe Cys Ile Phe  
 65                      70                      75                      80  
 Ser Arg Asp Gly Val Ser Pro Tyr Trp Pro Asp Trp Ser Arg Asn Pro  
                          85                      90                      95  
 Asp Leu Val Ile Cys Pro Pro Arg Pro Pro Lys Val Leu Gly Leu Gln  
                          100                      105                      110  
 Val

<210> 2693

<211> 388

<212> PRT

<213> Homo sapiens

<400> 2693

Met Asp Thr Lys Arg Cys Phe Ala Asn Arg Phe Asp Asp Tyr Gln Gly  
 1                      5                      10                      15  
 Ser Leu Leu Ala Gly Gln Cys Glu Glu Ala Val Ala Pro Leu Val Thr  
                          20                      25                      30  
 Ala Thr Ile Glu Arg Ile Leu Gln Glu Leu Pro Pro Leu Gly Gly Gly  
                          35                      40                      45  
 Ala Glu Ala Arg Gly Ala Thr Ala Gly Ala Ser Ala Cys Gln Gly Gly  
                          50                      55                      60  
 Leu Tyr Gly Gly Val Ala Gly Val Ala Tyr Met Leu Tyr His Val Ser  
 65                      70                      75                      80  
 Gln Ser Pro Leu Phe Ala Thr Ala Arg Glu Arg Tyr Leu Arg Ser Ala  
                          85                      90                      95  
 Lys Arg Leu Ile Asp Ala Cys Ala Arg Ala Glu Glu Trp Gly Glu Pro

100 105 110  
Asp Ala Asp Thr Arg Ala Ala Phe Leu Leu Gly Gly Ala Gly Val Tyr  
115 120 125  
Ala Val Ala Thr Leu Val Tyr His Ala Leu Gly Arg Ser Asp Tyr Val  
130 135 140  
Gln Pro Leu Gly Lys Phe Arg Ala Leu Cys Ala Val Cys Ala Pro Val  
145 150 155 160  
Ser Phe Leu Glu Cys Gly Ser Asp Glu Leu Phe Val Gly Arg Ala Gly  
165 170 175  
Tyr Leu Cys Ala Ala Leu Val Leu Lys Gln Lys Leu Ala Gln Glu Val  
180 185 190  
Leu Thr Pro Ala Gln Ile Lys Ser Ile Cys Gln Ala Ile Leu Asp Ser  
195 200 205  
Gly Lys Gln Tyr Ala Ile Lys Lys Arg Lys Pro Phe Pro Leu Met Tyr  
210 215 220  
Ser Tyr Tyr Gly Thr Glu Tyr Leu Gly Ala Ala His Gly Leu Ser Ser  
225 230 235 240  
Ile Leu Gln Met Leu Leu Ser Tyr His Glu His Leu Lys Pro Ser Asp  
245 250 255  
Arg Glu Leu Val Trp Gln Ser Val Asp Phe Leu Met Glu Gln Glu Gln  
260 265 270  
Asn Cys Asn Trp Pro Pro Glu Leu Gly Glu Thr Ile Glu Arg Glu Asn  
275 280 285  
Glu Leu Val His Trp Cys His Gly Ala Pro Gly Ile Ala Tyr Leu Phe  
290 295 300  
Ala Lys Ala Tyr Leu Val Ser Lys Lys Pro Gln Tyr Leu Asp Thr Cys  
305 310 315 320  
Ile Arg Cys Gly Glu Leu Thr Trp Gln Lys Gly Leu Leu Lys Lys Gly  
325 330 335

Pro Gly Ile Cys His Gly Val Ala Gly Ser Ala Tyr Val Phe Leu Leu  
                   340                  345                  350  
 Leu Tyr Arg Leu Thr Gly Asn Ser Lys Tyr Ile Tyr Arg Ala Gln Ser  
                   355                  360                  365  
 Ser Phe Pro Val Asn Leu Ile Lys Met Glu His Leu Leu Tyr Thr Arg  
                   370                  375                  380  
 Gln His Cys Phe  
 385

<210> 2694

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2694

Met Arg Ile Lys Val Gln Ala Thr Glu Gln Met Ala Tyr Cys Pro Ile  
       1                  5                  10                  15  
 Gln Cys Glu Lys Leu Cys Tyr Leu Pro Gly Asn Ser Lys Cys Ser Ser  
                   20                  25                  30  
 Val Tyr Glu Asn Cys Leu Glu Gln Ser Arg Ala Ile Gly Asn Val His  
                   35                  40                  45  
 Pro Arg Gly Val Gln Ser Gln Arg Asp Thr Ser Leu Leu Lys His Thr  
                   50                  55                  60  
 Cys Arg Val Asp Leu Phe Asp Asp Pro Cys Tyr Ile Asn Thr Gln Ala  
       65                  70                  75                  80  
 Leu Gln Ser Thr Pro Gly Ser Ala Gly Asn Gln Arg Ser Ala Gln Pro  
                   85                  90                  95  
 Leu Gly Ser Pro Trp His Cys Gly Lys Ala Pro Glu Thr Val Gln Pro

100	105	110	
Gly Ala Thr Ala Gln Pro Ala Ser Ser His Ser Leu Pro His Ile Lys			
115	120	125	
Gln Gln Leu Trp Ser Glu Glu Cys Tyr His Gly Lys Leu Ser Arg Lys			
130	135	140	
Ala Ala Glu Ser Leu Leu Val Lys Asp Gly Asp Phe Leu Val Arg Glu			
145	150	155	160
Ser Ala Thr Ser Pro Gly Gln Tyr Val Leu Ser Gly Leu Gln Gly Gly			
165	170	175	
Gln Ala Lys His Leu Leu Leu Val Asp Pro Glu Gly Lys Val Arg Thr			
180	185	190	
Lys Asp His Val Phe Asp Asn Val Gly His Leu Ile Arg Tyr His Met			
195	200	205	
Asp Asn Ser Leu Pro Ile Ile Ser Ser Gly Ser Glu Val Ser Leu Lys			
210	215	220	
Gln Pro Val Arg Lys Asp Asn Asn Pro Ala Leu Leu His Ser Asn Lys			
225	230	235	240

&lt;210&gt; 2695

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

Met Asn His Pro Phe Gln Gly Ser His Arg Gln Thr Pro Asp Phe Gly
1 5 10 15
Glu His Leu Ala Leu Leu Pro Pro Pro Pro Ser Ser Leu Pro Pro Pro
20 25 30

Met Pro Phe Pro Tyr Pro Leu Pro Gln Pro Ser Pro Pro Pro Leu Phe  
                   35                                  40                                  45  
 Pro Pro Leu Pro Gln Asp Thr Pro Phe Phe Pro Gly Gln Pro Phe Pro  
                   50                                  55                                  60  
 Pro His Glu Phe Phe Asn Tyr Asn Pro Val Glu Asp Phe Ser Met Pro  
                   65                                  70                                  75                                  80  
 Pro His Leu Gly Cys Gly Pro Gly Val Asn Phe Val Pro Gly Pro Leu  
                                   85                                  90                                  95  
 Pro Pro Pro Ile Pro Gly Pro Asn Pro His Gly Gln His Trp Gly Pro  
                                   100                                  105                                  110  
 Val Val His Arg Gly Met Pro Arg Tyr Val Pro Asn Ser Pro Tyr His  
                                   115                                  120                                  125  
 Val Arg Arg Met Gly Gly Pro Cys Arg Gln Arg Leu Arg His Ser Glu  
                                   130                                  135                                  140  
 Arg Leu Ile His Thr Tyr Lys Leu Asp Arg Arg Pro Pro Ala His Ser  
                   145                                  150                                  155                                  160  
 Gly Thr Trp Pro Gly  
                                   165

&lt;210&gt; 2696

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2696

Met Thr Leu Glu Leu Gly Gly Lys Val Thr Ile Glu Cys Ala Lys Asn  
           1                                  5                                  10                                  15  
 Asn Phe Gln Ala Gln Leu Glu Phe Lys Leu Lys Pro Phe Phe Gly Gly



20	25	30
Ser Thr Ser Ile Asn Gln Ile Ser Gly Lys Ile Thr Ser Gly Glu Glu		
35	40	45
Val Leu Ala Ser Leu Ser Gly His Trp Asp Arg Asp Val Phe Ile Lys		
50	55	60
Glu Glu Gly Ser Gly Ser Ser Ala Leu Phe Trp Thr Pro Ser Gly Glu		
65	70	75
Val Arg Arg Gln Arg Leu Arg Gln His Thr Val Pro Leu Glu Glu Gln		
85	90	95
Thr Glu Leu Glu Ser Glu Arg Leu Trp Gln His Val Thr Arg Ala Ile		
100	105	110
Ser Lys Gly Asp Gln His Arg Ala Thr Gln Glu Lys Phe Ala Leu Glu		
115	120	125
Glu Ala Gln Arg Gln Arg Ala Arg Glu Arg Gln Glu Ser Leu Met Pro		
130	135	140
Trp Lys Pro Gln Leu Phe His Leu Asp Pro Ile Thr Gln Glu Trp His		
145	150	155
Tyr Arg Tyr Glu Asp His Ser Pro Trp Asp Pro Leu Lys Asp Ile Ala		
165	170	175
Gln Phe Glu Gln Asp Gly Ile Leu Arg Thr Leu Gln Gln Glu Ala Val		
180	185	190
Ala Arg Gln Thr Thr Phe Leu Gly Ser Pro Gly Pro Arg His Glu Arg		
195	200	205
Ser Gly Pro Asp Gln Arg Leu Arg Lys Ala Ser Asp Gln Pro Ser Gly		
210	215	220
His Ser Gln Thr Thr Glu Ser Ser Gly Ser Thr Pro Glu Ser Cys Pro		
225	230	235
Glu Leu Ser Asp Glu Glu Gln Asp Gly Asp Phe Val Pro Gly Gly Glu		
245	250	255

Ser Pro Cys Pro Arg Cys Arg Lys Glu Ala Arg Arg Leu Gln Ala Leu  
 260 265 270  
 His Glu Ala Ile Leu Ser Ile Arg Glu Ala Gln Gln Glu Leu His Arg  
 275 280 285  
 His Leu Ser Ala Met Leu Ser Ser Thr Ala Arg Ala Ala Gln Ala Pro  
 290 295 300  
 Thr Pro Gly Leu Leu Gln Ser Pro Arg Ser Trp Phe Leu Leu Cys Val  
 305 310 315 320  
 Phe Leu Ala Cys Gln Leu Phe Ile Asn His Ile Leu Lys  
 325 330

<210> 2697

<211> 504

<212> PRT

<213> Homo sapiens

<400> 2697

Met Ser Ala Leu Leu Ile Pro Glu Ser Glu Glu Gln Gly Asn Lys Glu  
 1 5 10 15  
 Asn Ile His Gln Ile Lys Gln Thr Val Pro Ile His Ala Ala Asn Leu  
 20 25 30  
 His Ile Met His Pro His Pro Pro Gln Glu Pro Ser Ala Asp Lys Asn  
 35 40 45  
 Asn Asn Arg Arg Arg Leu Arg Leu Lys Ser Thr Ser Arg Glu Arg Thr  
 50 55 60  
 Glu Thr Pro Ser Gly Ser Ser Ser Gly Asn Asn Arg Ile Glu Asp Lys  
 65 70 75 80  
 Ala Ser Thr Ile Leu Thr Thr Val Ser Gln Gln Gly Ala Glu Leu Leu

	85	90	95
Asn Ser Gly Thr Leu Gly Pro Gln Ser Pro Asp Gln Ser Asp Glu Trp			
100	105	110	
Ile Phe Pro Glu Asn Ala Asp His Ile Ser Tyr Leu Ala Ser Ser Arg			
115	120	125	
Gln Ser Leu Leu Leu Gly Asp Asp Ser Cys Asn Pro Ser His Leu Trp			
130	135	140	
Leu Glu Ala Ser Lys Glu Ser Glu His Asp Gln Gln Ala Glu Glu Ser			
145	150	155	160
Gln Ser Val Pro Lys Asp Ile Phe Thr Phe Ser Ser Arg Pro Arg Ser			
165	170	175	
Ala Pro His Gly Lys Thr Gln Thr Met Ser Pro Glu Glu Leu Ser Phe			
180	185	190	
Ile Leu Asp Leu Lys Glu Asp Asn Ser Val Thr Ser Arg Asp Thr Gln			
195	200	205	
Ser Glu Asp Asp Phe Tyr Gly Gly Asp Ser Ser Glu Glu Gly Asn His			
210	215	220	
Ser Ile Gln Gly Ser Arg Gly Pro Thr Thr Gly Pro Ser Glu Leu Thr			
225	230	235	240
Gln Leu Thr Leu Glu Ser Leu Leu Gly Lys Ala Ala Lys Arg Thr Ser			
245	250	255	
Lys Glu Tyr Leu Arg Ser Ala Tyr Thr Glu Ala Gly Ala Thr Glu Ser			
260	265	270	
Gln Asp Ser Ser Met Glu Gln Ile Asp Arg Asn Asn Phe Glu Met Ser			
275	280	285	
Leu Leu Pro Thr Thr Cys Leu Ser Pro Thr Gly Arg Arg Cys Gly Ser			
290	295	300	
Cys Gln Lys Thr Pro Glu Pro Val Ile Lys Ala Lys Asp Leu Ser Ala			
305	310	315	320

Gln Gln Val Pro Ala Ser Leu Asn Lys Thr Ser Leu Lys Glu Ile Ser  
325 330 335  
Gly Glu Arg Leu Ser Ser Ile Pro Glu Ala Ser Glu Tyr Asp Trp Arg  
340 345 350  
Asn Tyr Gln Pro Ser Gln Met Ser Glu Ser Glu Leu Gln Met Leu Ala  
355 360 365  
Ser Leu Arg Trp Gln Gln Asn Glu Glu Leu Glu Asp Ala Gly Thr Ser  
370 375 380  
His Gly Leu Ser Ala Ser Gln Val Asp Asn Cys Asn Val Ser Ile Ser  
385 390 395 400  
Thr Ser Ser Asp Asp Thr Thr Thr Trp Asn Ser Cys Leu Pro Pro Pro  
405 410 415  
Val Asn Gln Gly Arg His Tyr Gln Lys Glu Met Asn Pro Pro Ser Pro  
420 425 430  
Ser Asn Pro Arg Asp Trp Leu Asn Met Leu Ser Pro Pro Ile Val Pro  
435 440 445  
Pro Ser Gln Gln Pro Ala Glu Gln Arg Pro Asp Ser Cys Glu Ser Leu  
450 455 460  
Ser Val Gln Gly Glu Glu Asp Leu Ser Val Glu Glu Asp Glu Glu Val  
465 470 475 480  
Leu Thr Leu Leu Tyr Asp Pro Cys Leu Asn Cys Tyr Phe Asp Pro Gln  
485 490 495  
Thr Gly Lys Tyr Tyr Glu Leu Val  
500

&lt;210&gt; 2698

&lt;211&gt; 122

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2698

Met Leu Val Phe Thr Ser Pro Gln Ala Leu Phe Gly Phe Gln His Asp  
1 5 10 15  
Ala Ser Asn His Thr Ile Val Gly Leu Gly Pro Asn Pro Val Pro Glu  
20 25 30  
Met Lys Glu Thr Thr Leu Gln Ala Pro Gln Pro Pro Gln Ala Pro Gln  
35 40 45  
Pro Leu Gln Pro Arg Lys Lys Arg Val Arg Arg Thr Thr Gln Leu Arg  
50 55 60  
Arg Thr Thr Gly Ala Pro Asp Ile Thr Trp Gly Met Leu Lys Lys Thr  
65 70 75 80  
Thr Gln Glu Ala Glu Arg Ile Leu Leu Arg Thr Gln Thr Pro Phe Thr  
85 90 95  
Pro Glu Asn Leu Phe Leu Ala Met Leu Ser Val Val His Cys Asn Ser  
100 105 110  
Arg Lys Asp Val Lys Pro Glu Asn Lys Gln  
115 120

<210> 2699

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2699

Met Ile Ile Ile Leu Arg Leu Gly His Phe Val Phe Glu Cys Gly Ala  
1 5 10 15

Ala Glu Leu Ile Gln Lys Pro Phe Ala Ala Tyr Gln Asp Phe Leu Lys  
                     20                    25                    30  
 Lys Phe Phe Cys Leu Cys Leu Pro Ser Gly Thr Leu Pro Trp Arg His  
                     35                    40                    45  
 Arg Gly Pro Arg Ala Lys Ala Leu Pro Gly His Leu Gln Asn Thr Pro  
                     50                    55                    60  
 Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys Thr  
                     65                    70                    75                    80  
 Leu Gln Pro Pro Arg Trp Arg Gly Ser Val Trp Ile Thr Val Asn Ala  
                                     85                    90                    95  
 Leu Pro His Trp Ser Val Gly Asp Thr Val Thr Asn Pro Leu Lys Ser  
                     100                    105                    110  
 Trp

&lt;210&gt; 2700

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2700

Met Ala Ala Thr Thr Leu Ser Gly Leu Leu Gln Cys Asn Phe Leu Thr  
                     1                    5                    10                    15  
 Met Asp Ser Pro Met Gln Ile His Phe Glu Gln Leu Cys Lys Thr Lys  
                     20                    25                    30  
 Leu Pro Lys Lys Arg Lys Arg Asp Pro Gly Ser Val Gly Asp Thr Ile  
                     35                    40                    45  
 Pro Ser Ala Glu Leu Val Lys Arg His Ala Gly Val Leu Gly Leu Gly

50 55 60  
Ala Cys Val Leu Ser Ser Pro Tyr Asp Val Pro Thr Trp Met Pro Gln  
65 70 75 80  
Leu Leu Met Asn Leu Ser Ala His Leu Asn Asp Pro Gln Pro Ile Glu  
85 90 95  
Met Thr Val Lys Lys Pro Tyr Pro Ile Ser Glu Gly Leu Thr Met Thr  
100 105 110  
Thr Gly Arg Asn Ile Asn Ser Asn Ser Leu Met Thr Asn Cys Leu Phe  
115 120 125  
Ser Pro Ile Phe Leu Cys His His Ala Ile Met His Arg Lys Val Ser  
130 135 140  
Gln Gln Ser Ser Glu Phe Thr Leu Val Trp  
145 150

&lt;210&gt; 2701

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2701

Met Ile Thr Glu Ala Leu Ala Gln Gly Gly Met His Ile Arg Ala Arg  
1 5 10 15  
Phe Pro Pro Thr Thr Ala Val Ser Ala Ile Pro Ser Ser Ser Ile Pro  
20 25 30  
Leu Gly Arg Gln Pro Met Ala Gln Val Ser Gln Ser Ser Leu Pro Met  
35 40 45  
Leu Ser Ser Pro Ser Pro Gly Gln Gln Val Gln Thr Pro Gln Ser Met  
50 55 60

Pro Pro Pro Pro Gln Pro Ser Pro Gln Pro Gly Gln Pro Ser Ser Gln  
65 70 75 80  
Pro Asn Ser Asn Val Ser Ser Gly Pro Ala Pro Ser Pro Ser Ser Phe  
85 90 95  
Leu Pro Ser Pro Ser Pro Gln Pro Ser Gln Ser Pro Val Thr Ala Arg  
100 105 110  
Thr Pro Gln Asn Phe Ser Val Pro Ser Pro Gly Pro Leu Asn Thr Pro  
115 120 125  
Val Asn Pro Ser Ser Val Met Ser Pro Ala Gly Ser Ser Gln Ala Glu  
130 135 140  
Glu Gln Gln Tyr Leu Asp Lys Leu Lys Gln Leu Ser Lys Tyr Ile Glu  
145 150 155 160  
Pro Leu Arg Arg Met Ile Asn Lys Ile Asp Lys Asn Glu Asp Arg Lys  
165 170 175  
Lys Asp Leu Ser Lys Met Lys Ser Leu Leu Asp Ile Leu Thr Asp Pro  
180 185 190  
Ser Lys Arg Cys Pro Leu Lys Thr Leu Gln Lys Cys Glu Ile Ala Leu  
195 200 205  
Glu Lys Leu Lys Asn Asp Met Ala Val Pro Thr Pro Pro Pro Pro  
210 215 220  
Val Pro Pro Thr Lys Gln Gln Tyr Leu Cys Gln Pro Leu Leu Asp Ala  
225 230 235 240  
Val Leu Ala Asn Ile Arg Ser Pro Val Phe Asn His Ser Leu Tyr Arg  
245 250 255  
Thr Phe Val Pro Ala Met Thr Ala Ile His Gly Pro Pro Ile Thr Ala  
260 265 270  
Pro Val Val Cys Thr Arg Lys Arg Arg Leu Glu Asp Asp Glu Arg Gln  
275 280 285  
Ser Ile Pro Ser Val Leu Gln Gly Glu Val Ala Arg Leu Asp Pro Lys



290	295	300
Phe Leu Val Asn Leu Asp Pro Ser His Cys Ser Asn Asn Gly Thr Val		
305	310	315
His Leu Ile Cys Lys Leu Asp Asp Lys Asp Leu Pro Ser Val Pro Pro		
325	330	335
Leu Glu Leu Ser Val Pro Ala Asp Tyr Pro Ala Gln Ser Pro Leu Trp		
340	345	350
Ile Asp Arg Gln Trp Gln Tyr Asp Ala Asn Pro Phe Leu Gln Ser Val		
355	360	365
His Arg Cys Met Thr Ser Arg Leu Leu Gln Leu Pro Asp Lys His Ser		
370	375	380
Val Thr Ala Leu Leu Asn Thr Trp Ala Gln Ser Val His Gln Ala Cys		
385	390	395
Leu Ser Ala Ala		400

&lt;210&gt; 2702

&lt;211&gt; 446

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2702

Met Thr Ser Lys Glu Ile Ile Leu Gly Leu Cys Leu Leu Ser Leu Val
1                      5                      10                      15
Leu Ser Met Ile Leu Met Val Ile Ile Arg Tyr Ile Ser Arg Val Leu
20                      25                      30
Val Trp Ile Leu Thr Ile Leu Val Ile Leu Gly Ser Leu Gly Gly Thr
35                      40                      45

Gly Val Leu Trp Trp Leu Tyr Ala Lys Gln Arg Arg Ser Pro Lys Glu  
 50 55 60  
 Thr Val Thr Pro Glu Gln Leu Gln Ile Ala Glu Asp Asn Leu Arg Ala  
 65 70 75 80  
 Leu Leu Ile Tyr Ala Ile Ser Ala Thr Val Phe Thr Val Ile Leu Phe  
 85 90 95  
 Leu Ile Met Leu Val Met Arg Lys Arg Val Ala Leu Thr Ile Ala Leu  
 100 105 110  
 Phe His Val Ala Gly Lys Val Phe Ile His Leu Pro Leu Leu Val Phe  
 115 120 125  
 Gln Pro Phe Trp Thr Phe Phe Ala Leu Val Leu Phe Trp Val Tyr Trp  
 130 135 140  
 Ile Met Thr Leu Leu Phe Leu Gly Thr Thr Gly Ser Pro Val Gln Asn  
 145 150 155 160  
 Glu Gln Gly Phe Val Glu Phe Lys Ile Ser Gly Pro Leu Gln Tyr Met  
 165 170 175  
 Trp Trp Tyr His Val Val Gly Leu Ile Trp Ile Ser Glu Phe Ile Leu  
 180 185 190  
 Ala Cys Gln Gln Met Thr Val Ala Gly Ala Val Val Thr Tyr Tyr Phe  
 195 200 205  
 Thr Arg Asp Lys Arg Asn Leu Pro Phe Thr Pro Ile Leu Ala Ser Val  
 210 215 220  
 Asn Arg Leu Ile Arg Tyr His Leu Gly Thr Val Ala Lys Gly Ser Phe  
 225 230 235 240  
 Ile Ile Thr Leu Val Lys Ile Pro Arg Met Ile Leu Met Tyr Ile His  
 245 250 255  
 Ser Gln Leu Lys Gly Lys Glu Asn Ala Cys Ala Arg Cys Val Leu Lys  
 260 265 270  
 Ser Cys Ile Cys Cys Leu Trp Cys Leu Glu Lys Cys Leu Asn Tyr Leu

275	280	285
Asn Gln Asn Ala Tyr Thr Ala Thr Ala Ile Asn Ser Thr Asn Phe Cys		
290	295	300
Thr Ser Ala Lys Asp Ala Phe Val Ile Leu Val Glu Asn Ala Leu Arg		
305	310	315
Val Ala Thr Ile Asn Thr Val Gly Asp Phe Met Leu Phe Leu Gly Lys		
325	330	335
Val Leu Ile Val Cys Ser Thr Gly Leu Ala Gly Ile Met Leu Leu Asp		
340	345	350
Tyr Gln Gln Asp Tyr Thr Val Trp Val Leu Pro Leu Ile Ile Val Cys		
355	360	365
Leu Phe Ala Phe Leu Val Ala His Cys Phe Leu Ser Ile Tyr Glu Met		
370	375	380
Val Val Asp Val Leu Phe Leu Cys Phe Ala Ile Asp Thr Lys Tyr Asn		
385	390	395
Asp Gly Ser Pro Gly Arg Glu Phe Tyr Met Asp Lys Val Leu Met Glu		
405	410	415
Phe Val Glu Asn Ser Arg Lys Ala Met Lys Glu Ala Gly Lys Gly Gly		
420	425	430
Val Ala Asp Ser Arg Glu Leu Lys Pro Met Leu Lys Lys Arg		
435	440	445

&lt;210&gt; 2703

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2703

Met Gln Ala Phe Pro Glu Gln Gln Lys Glu Ser Arg Ser Val Ala Arg  
 1 5 10 15  
 Leu Lys Cys Tyr Gly Val Ile Ser Ala His Cys Asn Leu Arg Phe Leu  
 20 25 30  
 Gly Ser Gly Asn Ser His Ala Ser Ala Ser Arg Val Ala Gly Ile Ala  
 35 40 45  
 Gly Thr Cys His His Ala Gln Leu Ile Phe Val Ile Leu Val Glu Met  
 50 55 60  
 Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Asp  
 65 70 75 80  
 Asn Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser  
 85 90 95  
 His Cys Ala Gln Pro Lys Lys Leu Ala Phe  
 100 105

&lt;210&gt; 2704

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2704

Met Asn His Ser Arg Asn Leu Phe Phe Ile Gln Ile Ser Glu Pro Pro  
 1 5 10 15  
 Thr Pro Glu Ile Leu Thr Tyr Trp Val Leu Gly Arg Thr Trp Lys Ser  
 20 25 30  
 Val Phe Ile Ala Thr His Pro Gly Asp Ser Ser Arg Trp Leu Trp Cys  
 35 40 45  
 Asn Ser Ser Met Gly Trp Tyr Leu Gly Ala Ser Pro Gly Val Arg Ala

50	55	60													
Gln	Val	Pro	His	Gly	Gln	Glu	Leu	Cys	Arg	Pro	Pro	Leu	Leu	Thr	Ser
65					70					75					80
Lys	Trp	Phe	Pro	Leu	Val	Gln	Leu	Glu	His	Glu	Cys	Tyr	Leu	Leu	Ser
				85					90					95	
Pro	Thr	Leu	Leu	Leu	Leu	Leu	Thr	Ile							
				100				105							

&lt;210&gt; 2705

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2705

Met	Ser	Val	Val	Ser	Gln	His	Trp	Arg	Pro	Pro	Ala	Gly	Asn	Leu	Arg
1				5					10					15	
Ser	Gly	Ser	Gln	Arg	Gly	Trp	Phe	Leu	Leu	Arg	Pro	Gly	Gly	Arg	Leu
				20				25						30	
Leu	Gln	Ala	Cys	Leu	Leu	Leu	Leu	Gly	Val	Pro	Ala	Val	Phe	Gly	Phe
			35					40					45		
His	Thr	Leu	Ser	Tyr	Leu	Thr	Leu	Val	Pro	Ala	Phe	Val	Phe	Thr	Trp
	50						55				60				
Pro	Phe	Pro	Pro	Val	Cys	Val	Cys	Val	Gln	Ile	Ser	Leu	Phe	Ile	Glu
65					70					75				80	
Met	Gln	Ser	Tyr	Gly	Ile	Arg	Ala	Pro	Pro	Cys	Ser	Ser	Met	Ala	Leu
					85					90				95	
Ser	Glu	Val	Ile	Thr	Ser	Thr	Ala	Thr	Leu	Phe	Pro	Asn	Thr	Val	Thr
					100				105					110	

Phe

&lt;210&gt; 2706

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2706

Met Arg Leu Glu Asp Glu Ala Ala Ala Gln Ala Leu Ile Gly Gly Arg

1 5 10 15

Asp Leu Val Val Ile Gly Phe Phe Gln Asp Leu Gln Asp Glu Asp Val

20 25 30

Ala Thr Phe Leu Ala Leu Ala Gln Asp Ala Leu Asp Met Thr Phe Gly

35 40 45

Leu Thr Asp Arg Pro Arg Leu Phe Gln Gln Phe Gly Leu Thr Lys Asp

50 55 60

Thr Val Val Leu Phe Lys Lys Phe Asp Glu Gly Arg Ala Asp Phe Pro

65 70 75 80

Val Asp Glu Glu Leu Gly Leu Asp Leu Gly Asp Leu Ser Arg Phe Leu

85 90 95

Val Thr His Ser Met Arg Leu Val Thr Glu Phe Asn Ser Gln Thr Ser

100 105 110

Ala Lys Ile Phe Ala Ala Arg Ile Leu Asn His Leu Leu Leu Phe Val

115 120 125

Asn Gln Thr Leu Ala Ala His Arg Glu Leu Leu Ala Gly Phe Gly Glu

130 135 140

Ala Ala Pro Arg Phe Arg Gly Gln Val Leu Phe Val Val Val Asp Val

145                      150                      155                      160  
Ala Ala Asp Asn Glu His Val Leu Gln Tyr Phe Gly Leu Lys Ala Glu  
                         165                      170                      175  
Ala Ala Pro Thr Leu Arg Leu Val Asn Leu Glu Thr Thr Lys Lys Tyr  
                         180                      185                      190  
Ala Pro Val Asp Gly Gly Pro Val Thr Ala Ala Ser Ile Thr Ala Phe  
                         195                      200                      205  
Cys His Ala Val Leu Asn Gly Gln Val Lys Pro Tyr Leu Leu Ser Gln  
                         210                      215                      220  
Glu Ile Pro Pro Asp Trp Asp Gln Arg Pro Val Lys Thr Leu Val Gly  
225                      230                      235                      240  
Lys Asn Phe Glu Gln Val Ala Phe Asp Glu Thr Lys Asn Val Phe Val  
                         245                      250                      255  
Lys Phe Tyr Ala Pro Trp Cys Thr His Cys Lys Glu Met Ala Pro Ala  
                         260                      265                      270  
Trp Glu Ala Leu Ala Glu Lys Tyr Gln Asp His Glu Asp Ile Ile Ile  
                         275                      280                      285  
Ala Glu Leu Asp Ala Thr Ala Asn Glu Leu Asp Ala Phe Ala Val His  
                         290                      295                      300  
Gly Phe Pro Thr Leu Lys Tyr Phe Pro Ala Gly Pro Gly Arg Lys Val  
305                      310                      315                      320  
Ile Glu Tyr Lys Ser Thr Arg Asp Leu Glu Thr Phe Ser Lys Phe Leu  
                         325                      330                      335  
Asp Asn Gly Gly Val Leu Pro Thr Glu Glu Pro Pro Glu Glu Pro Ala  
                         340                      345                      350  
Ala Pro Phe Pro Glu Pro Pro Ala Asn Ser Thr Met Gly Ser Lys Glu  
                         355                      360                      365  
Glu Leu  
                         370

&lt;210&gt; 2707

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2707

Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp Pro Val Phe Ala  
1 5 10 15  
Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr Phe Leu Asn Asn  
20 25 30  
Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu Lys Val Gln Ser  
35 40 45  
Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile Ser Thr Leu Ile  
50 55 60  
Thr Asn Leu Ile Ser Gln Tyr Gln Asn Leu Gln Ser Asp Phe Ser Asn  
65 70 75 80  
Arg Val Glu Ile Ser Lys Ala Ser Ala Ser Leu Asn Gly Val Arg Thr  
85 90 95  
Met Gln Arg Arg Arg His Thr Leu Leu Asn Cys Pro Ser Val Asn Cys  
100 105 110  
Val Ala Phe Ile  
115

&lt;210&gt; 2708

&lt;211&gt; 218

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2708

Met Thr Met Tyr Lys Ser Lys Arg Arg His Gln Arg Tyr Ile Asn Met  
 1 5 10 15  
 Ala Gly Glu Pro Lys Pro Tyr Arg Pro Lys Pro Gly Asn Lys Arg Pro  
 20 25 30  
 Leu Ser Ala Leu Tyr Arg Leu Glu Ser Lys Glu Pro Phe Leu Ser Val  
 35 40 45  
 Gly Gly Tyr Val Phe Asp Tyr Asp Tyr Tyr Arg Asp Asp Phe Tyr Asn  
 50 55 60  
 Arg Leu Phe Asp Tyr His Gly Arg Val Pro Pro Pro Pro Arg Ala Val  
 65 70 75 80  
 Ile Pro Leu Lys Arg Pro Arg Val Ala Val Thr Thr Thr Arg Arg Gly  
 85 90 95  
 Lys Gly Val Phe Ser Met Lys Gly Gly Ser Arg Ser Thr Ala Ser Gly  
 100 105 110  
 Ser Thr Gly Ser Lys Leu Lys Ser Asp Glu Leu Gln Thr Ile Lys Lys  
 115 120 125  
 Glu Leu Thr Gln Ile Lys Thr Lys Ile Asp Ser Leu Leu Gly Arg Leu  
 130 135 140  
 Glu Lys Ile Glu Lys Gln Gln Lys Ala Glu Ala Glu Ala Gln Lys Lys  
 145 150 155 160  
 Gln Leu Glu Glu Ser Leu Val Leu Ile Gln Glu Glu Cys Val Ser Glu  
 165 170 175  
 Ile Ala Asp His Ser Thr Glu Glu Pro Ala Glu Gly Gly Pro Asp Ala  
 180 185 190  
 Asp Gly Glu Glu Met Thr Asp Gly Ile Glu Glu Asp Phe Asp Glu Asp  
 195 200 205

Gly Gly His Glu Leu Phe Leu Gln Ile Lys

210

215

<210> 2709

<211> 362

<212> PRT

<213> Homo sapiens

<400> 2709

Met Pro Asp Cys Pro Val Ser Leu Leu Gln Trp Leu Phe Gln Leu Leu

1

5

10

15

Thr Trp Pro Pro Glu Thr Ser Leu Gly Ala Phe Gly Leu Leu Trp Asp

20

25

30

Leu Ile Val Asp Gly Ile Phe Leu Gln Pro Asp Glu Asp Lys His Leu

35

40

45

Trp Cys Pro Ser Leu Gln Glu Val Arg Glu Ala Phe His Ser Leu Gly

50

55

60

Ala His Ser Pro Ala Leu Tyr Pro Leu Gly Pro Phe Trp His Gly Gly

65

70

75

80

Arg Val Leu Pro Gly Glu Ala Gly Leu Asn Glu Asn Glu Glu Gln Asp

85

90

95

Ala Pro Gln Glu Ile Ala Leu Asp Ile Ser Leu Gly His Ile Tyr Lys

100

105

110

Phe Leu Ala Leu Cys Ala Gln Ala Gln Pro Gly Ala Tyr Thr Asp Glu

115

120

125

Asn Leu Met Gly Leu Ile Glu Leu Leu Cys Arg Thr Ser Leu Asp Val

130

135

140

Gly Leu Arg Leu Leu Pro Lys Val Asp Leu Gln Gln Leu Leu Leu Leu

145                      150                      155                      160  
Leu Leu Glu Asn Ile Arg Glu Trp Pro Gly Lys Leu Gln Glu Leu Cys  
                         165                      170                      175  
Cys Thr Leu Ser Trp Val Ser Asp His His His Asn Leu Leu Ala Leu  
                         180                      185                      190  
Val Gln Phe Phe Pro Asp Met Thr Ser Arg Ser Arg Arg Leu Arg Ser  
                         195                      200                      205  
Gln Leu Ser Leu Val Val Ile Ala Arg Met Leu Gly Gln Gln Glu Met  
                         210                      215                      220  
Leu Pro Leu Trp Gln Glu Lys Thr Gln Leu Ser Ser Leu Ser Arg Leu  
225                      230                      235                      240  
Leu Gly Leu Met Arg Pro Ser Ser Leu Arg Gln Tyr Leu Asp Ser Val  
                         245                      250                      255  
Pro Leu Pro Pro Cys Gln Glu Gln Gln Pro Lys Ala Ser Ala Glu Leu  
                         260                      265                      270  
Asp His Lys Ala Cys Tyr Leu Cys His Ser Leu Leu Met Leu Ala Gly  
                         275                      280                      285  
Val Val Val Ser Cys Gln Asp Ile Thr Pro Asp Gln Trp Gly Glu Leu  
                         290                      295                      300  
Gln Leu Leu Cys Met Gln Leu Asp Arg His Ile Ser Thr Gln Ile Arg  
305                      310                      315                      320  
Glu Ser Pro Gln Ala Met His Arg Thr Met Leu Lys Asp Leu Ala Thr  
                         325                      330                      335  
Gln Thr Tyr Ile Arg Trp Gln Glu Leu Leu Thr His Cys Gln Pro Gln  
                         340                      345                      350  
Ala Gln Tyr Phe Ser Pro Trp Lys Asp Ile  
                         355                      360

&lt;210&gt; 2710

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2710

Met Gln Gly Gly Trp Phe Pro Arg Lys Pro Pro Asn Glu Glu Ile Val

1 5 10 15

Gly Asn Val Leu Gln Gly Ala Ala Ser Leu Trp Ser Gln Thr Arg Gly

20 25 30

Arg Ser Ile Arg Pro Asn Met Ala Gly Cys Val Ser Leu Arg Asn Ala

35 40 45

Gly Ser Ser Ala Arg Leu Ser Ala Ile Cys Lys Met Trp Pro Lys Asn

50 55 60

Tyr Leu Lys Ile Asn His Ile Lys Thr Arg Ala Ser Met Asn Gln Leu

65 70 75 80

Leu Arg Ile Ala Val Ala Glu Lys Gly Leu Val Ser Pro Cys Phe Leu

85 90 95

Arg Pro Pro Ser Ser Ser Ser His Cys Gln Gly Leu Leu Ser Pro Pro

100 105 110

Ser Ala Phe Ser Cys Leu Ala Leu Cys His Leu Leu Trp Arg Pro His

115 120 125

Val Phe Ile

130

&lt;210&gt; 2711

&lt;211&gt; 608

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2711

Met Gly Ser Val Thr Val Arg Tyr Phe Cys Tyr Gly Cys Leu Phe Thr  
 1 5 10 15  
 Ser Ala Thr Trp Thr Val Leu Leu Phe Val Tyr Phe Asn Phe Ser Glu  
 20 25 30  
 Val Thr Gln Pro Leu Lys Asn Val Pro Val Lys Gly Ser Gly Pro His  
 35 40 45  
 Gly Pro Ser Pro Lys Lys Phe Tyr Pro Arg Phe Thr Arg Gly Pro Ser  
 50 55 60  
 Arg Val Leu Glu Pro Gln Phe Lys Ala Asn Lys Ile Asp Asp Val Ile  
 65 70 75 80  
 Asp Ser Arg Val Glu Asp Pro Glu Glu Gly His Leu Lys Leu Ser Ser  
 85 90 95  
 Glu Leu Gly Met Ile Phe Asn Glu Arg Asp Gln Glu Leu Arg Asp Leu  
 100 105 110  
 Gly Tyr Gln Lys His Ala Phe Asn Met Leu Ile Ser Asp Arg Leu Gly  
 115 120 125  
 Tyr His Arg Asp Val Pro Asp Thr Arg Asn Ala Ala Cys Lys Glu Lys  
 130 135 140  
 Phe Tyr Pro Pro Asp Leu Pro Ala Ala Ser Val Val Ile Cys Phe Tyr  
 145 150 155 160  
 Asn Glu Ala Phe Ser Ala Leu Leu Arg Thr Val His Ser Val Ile Asp  
 165 170 175  
 Arg Thr Pro Ala His Leu Leu His Glu Ile Ile Leu Val Asp Asp Asp  
 180 185 190  
 Ser Asp Phe Asp Asp Leu Lys Gly Glu Leu Asp Glu Tyr Val Gln Lys  
 195 200 205

Tyr Leu Pro Gly Lys Ile Lys Val Ile Arg Asn Thr Lys Arg Glu Gly  
210 215 220

Leu Ile Arg Gly Arg Met Ile Gly Ala Ala His Ala Thr Gly Glu Val  
225 230 235 240

Leu Val Phe Leu Asp Ser His Cys Glu Val Asn Val Met Trp Leu Gln  
245 250 255

Pro Leu Leu Ala Ala Ile Arg Glu Asp Arg His Thr Val Val Cys Pro  
260 265 270

Val Ile Asp Ile Ile Ser Ala Asp Thr Leu Ala Tyr Ser Ser Ser Pro  
275 280 285

Val Val Arg Gly Gly Phe Asn Trp Gly Leu His Phe Lys Trp Asp Leu  
290 295 300

Val Pro Leu Ser Glu Leu Gly Arg Ala Glu Gly Ala Thr Ala Pro Ile  
305 310 315 320

Lys Ser Pro Thr Met Ala Gly Gly Leu Phe Ala Met Asn Arg Gln Tyr  
325 330 335

Phe His Glu Leu Gly Gln Tyr Asp Ser Gly Met Asp Ile Trp Gly Gly  
340 345 350

Glu Asn Leu Glu Ile Ser Phe Arg Ile Trp Met Cys Gly Gly Lys Leu  
355 360 365

Phe Ile Ile Pro Cys Ser Arg Val Gly His Ile Phe Arg Lys Arg Arg  
370 375 380

Pro Tyr Gly Ser Pro Glu Gly Gln Asp Thr Met Thr His Asn Ser Leu  
385 390 395 400

Arg Leu Ala His Val Trp Leu Asp Glu Tyr Lys Glu Gln Tyr Phe Ser  
405 410 415

Leu Arg Pro Asp Leu Lys Thr Lys Ser Tyr Gly Asn Ile Ser Glu Arg  
420 425 430

Val Glu Leu Arg Lys Lys Leu Gly Cys Lys Ser Phe Lys Trp Tyr Leu

435 440 445  
Asp Asn Val Tyr Pro Glu Met Gln Ile Ser Gly Ser His Ala Lys Pro  
450 455 460  
Gln Gln Pro Ile Phe Val Asn Arg Gly Pro Lys Arg Pro Lys Val Leu  
465 470 475 480  
Gln Arg Gly Arg Leu Tyr His Leu Gln Thr Asn Lys Cys Leu Val Ala  
485 490 495  
Gln Gly Arg Pro Ser Gln Lys Gly Gly Leu Val Val Leu Lys Ala Cys  
500 505 510  
Asp Tyr Ser Asp Pro Asn Gln Ile Trp Ile Tyr Asn Glu Glu His Glu  
515 520 525  
Leu Val Leu Asn Ser Leu Leu Cys Leu Asp Met Ser Glu Thr Arg Ser  
530 535 540  
Ser Asp Pro Pro Arg Leu Met Lys Cys His Gly Ser Gly Gly Ser Gln  
545 550 555 560  
Gln Trp Thr Phe Gly Lys Asn Asn Arg Leu Tyr Gln Val Ser Val Gly  
565 570 575  
Gln Cys Leu Arg Ala Val Asp Pro Leu Gly Gln Lys Gly Ser Val Ala  
580 585 590  
Met Ala Ile Cys Asp Gly Ser Ser Ser Gln Gln Trp His Leu Glu Gly  
595 600 605

&lt;210&gt; 2712

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2712

Met Ala Leu Phe Ser Val Arg Lys Ala Arg Glu Cys Trp Arg Phe Ile  
 1 5 10 15  
 Arg Ala Leu His Lys Gly Pro Ala Ala Thr Leu Ala Pro Gln Lys Glu  
 20 25 30  
 Ser Gly Glu Arg Val Phe Ser Gly Ile Gln Pro Thr Gly Ile Leu His  
 35 40 45  
 Leu Gly Asn Tyr Leu Gly Ala Ile Glu Ser Trp Val Asn Leu Gln Glu  
 50 55 60  
 Glu Tyr Asp Thr Val Ile Tyr Ser Ile Val Asp Leu His Ser Ile Thr  
 65 70 75 80  
 Val Pro Gln Asp Pro Thr Val Leu Gln Gln Ser Ile Leu Asp Met Thr  
 85 90 95  
 Ala Val Leu Leu Ala Cys Gly Ile Asn Pro Glu Lys Ser Ile Leu Phe  
 100 105 110  
 Gln Gln Ser Lys Val Ser Glu His Thr Gln Leu Ser Trp Ile Leu Thr  
 115 120 125  
 Cys Met Val Arg Leu Pro Arg Leu Gln His Leu His Gln Trp Lys Ala  
 130 135 140  
 Lys Ala Ala Lys Gln Lys His Asp Gly Thr Val Gly Leu Leu Thr Tyr  
 145 150 155 160  
 Pro Val Leu Gln Ala Ala Asp Ile Leu Cys Tyr Lys Ser Thr His Val  
 165 170 175  
 Pro Val Gly Glu Asp Gln Val Gln His Met Glu Leu Val Gln Asp Leu  
 180 185 190  
 Ala Arg Ser Phe Asn Gln Lys Tyr Gly Glu Phe Phe Pro Leu Pro Lys  
 195 200 205  
 Ser Ile Leu Thr Ser Met Lys Lys Val Lys Ser Leu Arg Asp Pro Ser  
 210 215 220  
 Ser Lys Met Ser Lys Ser Asp Pro Asp Lys Leu Ala Thr Val Arg Ile



225                      230                      235                      240  
 Thr Asp Ser Pro Glu Glu Ile Val Gln Lys Phe Arg Lys Ala Val Thr  
                          245                      250                      255  
 Asp Phe Thr Ser Glu Val Thr Tyr Glu Pro Asp Ser Arg Ala Gly Val  
                          260                      265                      270  
 Ser Asn Met Val Ala Ile His Ala Ala Val Ser Gly Leu Ser Val Glu  
                          275                      280                      285  
 Glu Val Val Arg Ser Ser Ala Gly Leu Asp Thr Ala Arg Tyr Lys Leu  
                          290                      295                      300  
 Leu Val Ala Asp Ala Val Ile Glu Lys Phe Ala Pro Ile Arg Lys Glu  
 305                      310                      315                      320  
 Ile Glu Lys Leu Lys Met Asp Lys Asp His Leu Arg Lys Val Leu Leu  
                          325                      330                      335  
 Val Gly Ser Ala Lys Ala Lys Glu Leu Ala Ser Pro Val Phe Glu Glu  
                          340                      345                      350  
 Val Lys Lys Leu Val Gly Ile Leu  
                          355                      360

<210> 2713

<211> 295

<212> PRT

<213> Homo sapiens

<400> 2713

Met Gln Met Ser Val Pro Cys Val Leu Ser Ser Leu Gln Asn His Glu  
   1                      5                      10                      15  
 Pro Asn Lys Pro Leu Phe Thr Thr Gln Ser Gln Leu Leu Ser Lys Val  
                          20                      25                      30

Leu Glu Val Leu Asp Pro Asp Arg Lys Leu Glu Asp Thr Trp Ala Tyr  
 35 40 45  
 Cys Gln Asp Thr Arg Lys Gly Met Lys Glu Pro Thr Lys Leu Leu Lys  
 50 55 60  
 Lys His Ser Thr Gln Val Tyr Leu Gly Pro Ser Lys Lys Thr Ser Val  
 65 70 75 80  
 Ser Asn Ala Gly Gln Trp Leu Tyr Glu Glu Lys Pro His Lys Met Asp  
 85 90 95  
 Leu Leu His Glu Asn Gly Pro Arg Pro Gly Leu His Glu Asn Val Cys  
 100 105 110  
 Lys Ala Val Ser Asp Phe Cys Lys Trp Val Thr Thr Phe Gly Ile Ser  
 115 120 125  
 Asp Ile Asp Glu Glu Phe Ile Leu Lys Gln Phe Asp Ile Asp Tyr Glu  
 130 135 140  
 Thr Lys Pro Ser His Asp Ala Leu His Thr Met Lys Leu Asn Gln Val  
 145 150 155 160  
 Pro Leu Glu Leu Lys Arg Ser Val Gly Leu Ser Lys Leu Gln Lys Thr  
 165 170 175  
 Glu Phe Phe Gln Lys Leu Gly Tyr Glu Arg Lys Leu Gln Lys Pro Gln  
 180 185 190  
 Asn Pro Tyr Lys Pro Lys Trp Val Lys Met Arg Tyr Gly Ala Trp Tyr  
 195 200 205  
 Leu Asn Pro Lys Leu Trp Lys Lys Gln Arg Val Asp Glu Pro Leu Val  
 210 215 220  
 Asp Pro Glu Val Ser His Lys Ala Gln Glu Glu Asn Phe Lys Lys Glu  
 225 230 235 240  
 Leu Gln Glu Gln Glu Glu Leu Leu Ala Asp Leu His Gly Thr Val Ala  
 245 250 255  
 Phe Lys Asp Phe Ile Leu Ser Arg Gly Tyr Arg Met Pro Arg Phe Leu

260                      265                      270  
 Glu Asn Met Tyr Ile Gly Lys Glu Cys Lys Arg Ala Cys Asn Lys Thr  
 275                      280                      285  
 Pro Ile Lys Arg Thr Gln Ala  
 290                      295

<210> 2714

<211> 288

<212> PRT

<213> Homo sapiens

<400> 2714

Met Ile Leu Arg Arg Ala Pro Ser Ser Leu Gln Thr Pro Ser Leu Leu  
 1                      5                      10                      15  
 Leu Asp Glu Arg Leu Leu Val Lys Arg Cys Ala Leu Val Val Ile Trp  
 20                      25                      30  
 Ala Phe Gly Leu Arg Leu His Arg Val Gln Pro Gly Ala Arg Asn His  
 35                      40                      45  
 Leu Leu Glu Ala Ala Pro Ser Leu Ala Thr Glu Ala Leu Pro Ser Arg  
 50                      55                      60  
 Cys Gln Ser Pro Ala Trp Arg Ser Cys Gln Met Ala Lys Val Pro Phe  
 65                      70                      75                      80  
 Ser Gln Val Lys Cys Ser Ala Tyr Thr Gly Ala Lys Thr Leu Ser Trp  
 85                      90                      95  
 His Leu Cys Trp Pro Ser Ala Gly Ala Lys Pro Arg Gly Ser Leu Pro  
 100                      105                      110  
 Trp Val Ser Arg Val Leu Pro Ala Ser Ala Trp Cys Pro Val Gly Ala  
 115                      120                      125

Ala Ala Ser Leu Leu Val Glu Gln Met Pro Gly Cys Gln Leu Gly Gly  
130 135 140  
Gly Ala Asn Arg Ala Leu Gln Ala Trp Ser Trp Gln Pro Ser Trp Trp  
145 150 155 160  
Pro Leu Phe Arg Ala Pro Thr Leu Gly Ser Ile Arg Lys Gly Leu Lys  
165 170 175  
Met Ile Glu Glu Ala Pro Phe Arg Gly Gln Gly Gly Cys Cys Asp Arg  
180 185 190  
Val Ala Arg Gly Arg Ala Phe Pro Ala Ala Gly Gly Asp Ala Thr Trp  
195 200 205  
Thr Arg Arg Arg Thr Ala His Ser Ser Ser Thr Pro His Pro Gly Lys  
210 215 220  
Ala Ala Ala Ser Pro Arg Val Gly Trp Ser Gly Pro Leu Gln Asp Ser  
225 230 235 240  
Cys Gly Val Pro Ser Pro Ala His Thr Arg Asp Ala Ile Cys Gly Phe  
245 250 255  
Gly Glu Cys Phe Ala Asp Asp Pro Ser Lys Gln Ser His Pro Arg Met  
260 265 270  
Gly Phe Ser Glu Ser Gln Thr Leu Asp Leu Ser Ser Gln Arg Glu Gly  
275 280 285

&lt;210&gt; 2715

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2715

Met Gln Leu Leu Lys Ala Leu Trp Ala Leu Ala Gly Ala Ala Leu Cys

1	5	10	15
Cys Phe Leu Val	Leu Val Ile His Ala Gln Phe	Leu Lys Glu Gly Gln	
20	25	30	
Leu Ala Ala Gly Thr Cys Glu Ile Val Thr Leu Asp Arg Asp Ser Ser			
35	40	45	
Gln Pro Arg Arg Thr Ile Ala Arg Gln Thr Ala Arg Cys Ala Cys Arg			
50	55	60	
Lys Gly Gln Ile Ala Gly Thr Thr Arg Ala Arg Pro Ala Cys Val Asp			
65	70	75	80
Ala Arg Ile Ile Lys Thr Lys Gln Trp Cys Asp Met Leu Pro Cys Leu			
85	90	95	
Glu Gly Glu Gly Cys Asp Leu Leu Ile Asn Arg Ser Gly Trp Thr Cys			
100	105	110	
Thr Gln Pro Gly Gly Arg Ile Lys Thr Thr Thr Val Ser			
115	120	125	

&lt;210&gt; 2716

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2716

Met Ser Arg His Ser Leu Glu Glu Gly Leu Asp Met Val Asn Arg Glu			
1	5	10	15
Thr Ala His Glu Arg Glu Met Gln Thr Ala Met Gln Ile Ser Gln Ser			
20	25	30	
Trp Asp Glu Ser Leu Ser Leu Ser Asp Ser Asp Phe Asp Lys Pro Glu			
35	40	45	

Lys Leu Tyr Ser Pro Lys Arg Ile Asp Phe Thr Pro Val Ser Pro Ala  
50 55 60  
Pro Ser Pro Thr Arg Gly Phe Gly Lys Met Phe Val Ser Ser Ser Gly  
65 70 75 80  
Leu Pro Pro Ser Pro Val Pro Ser Pro Arg Arg Phe Ser Ser Arg Arg  
85 90 95  
Ser Gln Ser Pro Val Lys Cys Ile Arg Pro Ser Val Leu Gly Pro Leu  
100 105 110  
Lys Arg Lys Gly Glu Met Glu Thr Glu Ser Gln Pro Lys Arg Leu Phe  
115 120 125  
Gln Gly Thr Thr Asn Met Leu Ser Pro Asp Ala Ala Gln Leu Ser Asp  
130 135 140  
Leu Ser Ser Trp Trp Cys Tyr Gln Gly Glu Glu Ile Pro Ala Leu Thr  
145 150 155 160  
Arg Cys Val Glu His Leu Gln Met Asn Glu  
165 170

&lt;210&gt; 2717

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2717

Met Leu Val Arg Phe Ala Leu Ser Leu Leu Pro Asn Leu Gln Pro Gly  
1 5 10 15  
Gln Gln Ser Glu Val Pro Leu Trp Pro Glu Ala Ser Pro Pro Cys Leu  
20 25 30  
Pro Ser Phe Asp Leu Ser Phe Pro Ser Met Lys Pro Ser Gly Pro Cys

35                                      40                                      45  
 His Phe Phe Thr Thr Glu Asn Ser Trp Leu Leu Gln Lys Pro Glu Tyr  
 50                                      55                                      60  
 Leu Ser Phe Pro Ala Gln Met Ala Ala Ser Leu Ser Cys Pro Ile Trp  
 65                                      70                                      75                                      80  
 Ala Thr Ser Ala Ser Cys Arg His Pro Arg Gln Met Asp Ser Val Gly  
 85                                      90                                      95  
 Gly Asn Gln Ala Leu Arg Ile Gln Cys Glu Glu Val Ala Glu Cys Leu  
 100                                      105                                      110  
 Phe Ile Leu Phe  
 115

<210> 2718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2718

Met Ser Ala Ala Gly Lys Ala Gly Arg Ala Asp Thr Arg Gln Leu Phe  
 1                                      5                                      10                                      15  
 Pro Ser Leu Gly Lys Gln His Gly His Gly Cys His Arg Val Pro Arg  
 20                                      25                                      30  
 Arg Cys Ser His Gly Arg Arg Asn Ala Phe Leu Gln Gly Ala Ser Trp  
 35                                      40                                      45  
 Leu Ser Ser Pro Arg Ser Ser Gly Arg Val Arg Ser Val Ala Leu Val  
 50                                      55                                      60  
 His Arg Arg Arg Leu Pro Arg Leu Lys Leu Val Met Arg Ser Trp Ala  
 65                                      70                                      75                                      80

Pro Gly Gly Ser Ser Leu Arg Asn Thr Leu Glu Thr Cys Asp Ile Ser

85

90

95

Ala His Thr Pro His

100

<210> 2719

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2719

Met Met Thr Ser Leu Asn Cys Ala Arg Thr Arg Val Pro Gly Ala Pro

1

5

10

15

Cys Asp His Leu Gly Arg Gly Leu Arg Leu Val Val Thr Gln Arg Ser

20

25

30

Asp Pro Leu Pro Pro Ala Ala Leu Ser Asp Pro Val Ala Lys Lys Ser

35

40

45

Cys Met Leu Asn Leu Leu Ser Ser Leu Pro Glu Ala Asn Leu Leu Thr

50

55

60

Phe Leu Phe Leu Leu Asp His Leu Glu Arg Met Ala Glu Lys Glu Ala

65

70

75

80

Val Asn Lys Met Ser Leu His Asn Leu Gly Thr Val Phe Gly Pro Thr

85

90

95

Leu Leu Arg Pro Ser Glu Lys Glu Ser Lys Leu Pro Ala Asn Pro Ser

100

105

110

Gln Pro Ile Thr Met Thr Asp Ser Trp Ser Leu Glu Val Met Ser Gln

115

120

125

Ile Gln Ile Pro Asn Lys Met Leu Glu Cys Asn Pro Trp Thr Ile Arg



130 135 140  
Val Leu Ala Ala Phe Gly Leu Pro Leu Ser Ala Trp Leu Arg Cys Ser  
145 150 155 160  
Gln Glu Trp Val Leu Lys Ser Leu Glu Asn Arg Ile Arg Gly Gly Leu  
165 170 175  
Gly Arg Gly Gln Ala  
180

<210> 2720

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2720

Met Ala Ala Gln Pro Phe Leu Lys Leu Cys Glu Asp Glu Arg Val Arg  
1 5 10 15  
Gly Gly Glu Trp Ser Ser Ser Gln Gly Pro Val Glu Val Thr Ala His  
20 25 30  
Pro Pro Ala Cys Phe Ser Ser Ala Gly Ala Gly Trp Trp Ser Arg Leu  
35 40 45  
Gln Gly Trp Ala Leu Ala Pro Leu Glu Gln Ala Arg Ala Pro Glu Glu  
50 55 60  
Gly Leu Leu Pro Asp Trp Cys Trp Ser Ala Phe Gly Ser Ala Val Gly  
65 70 75 80  
Ser Arg Asn Ile Pro Gly Pro Cys Leu Gly Thr Pro Gly Gly Lys Gln  
85 90 95  
Asp Gly Arg Trp Pro Val His Thr Phe Pro Leu Ile Leu Gly Ala Leu  
100 105 110

Ile Pro Thr Ser His Pro Leu Gln Trp Gly Pro Trp Pro Thr Ser Gln

115

120

125

Arg

<210> 2721

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2721

Met Gly Asp Gly Cys Thr Phe Cys Ala Pro Arg Ser Leu Trp Leu Pro

1

5

10

15

Ala Ala Asp Pro Ser Leu Ile Leu Leu Pro Asp Leu Ser Ile Phe Leu

20

25

30

Ser Ala Cys Glu Lys Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu

35

40

45

Cys Leu Ala Ser Leu His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly

50

55

60

Ser Ser Ser Ser Val Ser Arg Ala Ala Val Leu Leu Leu Leu Val Phe

65

70

75

80

Ser His Phe Pro Pro Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu

85

90

95

Tyr Lys Gln Asn Val Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala

100

105

110

Glu Ala Val Leu Leu Glu Asp Arg Arg Arg His His Arg Val Phe Pro

115

120

125

Leu Pro Leu Pro Leu Leu Arg Asn Val Ser Ile Pro Ile Gly

130

135

140

&lt;210&gt; 2722

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2722

Met Cys Leu Asn Leu Leu Ala Gln Leu Leu Pro Pro Gly Ser Leu Ser  
 1 5 10 15  
 Arg Pro Arg Thr Phe Ser Ser Gln Pro Leu Gln Thr Lys Leu Met Thr  
 20 25 30  
 His Asn Gly Leu Phe Arg Pro Ile Pro Tyr Leu Thr Ala Val Ser Ala  
 35 40 45  
 Asp Glu Pro Thr Ala Ser Gln Gln Pro Pro Gln Ala Gln Leu His Arg  
 50 55 60  
 Tyr Asn Gly Leu Phe Arg Pro Ser Ser Cys Leu Pro Ala Phe Ser Pro  
 65 70 75 80  
 Gly Pro Glu Leu Ser Gln Val Asp Leu Thr Arg Pro Ser Ser Cys Phe  
 85 90 95  
 Phe Ala Ala Ser Pro Gly Pro Ala Pro Ala Ser Trp Trp Pro Leu Gln  
 100 105 110  
 Ala Gln Pro Val Pro Pro Val Gly Leu Tyr Ser Pro Asn Ile Cys Leu  
 115 120 125  
 Thr Ala Asp Ser Ser Arg Pro Ala Ser Ala Ser Gln Trp Thr Leu Gln  
 130 135 140  
 Thr Gln Met Val Ser His Cys Gly Ile Leu Arg Arg Ser Ser Cys Leu  
 145 150 155 160

Ser Ala Ala Ser Pro Gly Pro Ala Pro Pro Ala Ser Gln Trp Pro Leu  
                     165                    170                    175  
 Ser Ala Gln Pro Ser Ser Cys Leu Pro Ala Ala Phe Pro Ser Pro Ala  
                     180                    185                    190  
 Phe Asp Phe Trp Trp Pro Leu Gln Ala Ser Thr Arg Pro Ser Leu Leu  
                     195                    200                    205  
 Pro Pro Glu Gly Leu His Arg Pro Ser Leu Cys Leu Thr Ala Asp Ser  
                     210                    215                    220  
 Pro Arg Pro Ala Ser Ser Arg Leu Thr Ala Ala Ser Pro Val Gln Ser  
 225                    230                    235                    240  
 Ser Cys Leu Ser Ala Thr Ser Ala Gly Pro Ala Thr Ala Cys Gln Trp  
                     245                    250                    255  
 Pro Leu

<210> 2723

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2723

Met Ser Phe Ser Pro Tyr Ser Thr Met Ile Thr Val Cys Val Cys Phe  
           1                    5                    10                    15  
 Asn Ser Arg Val Gln Leu Thr Val Pro Ser Phe Thr Ala Trp Leu Arg  
                     20                    25                    30  
 Ser Arg Tyr Ser Lys Ala Leu Phe Met Val Leu Arg Arg Ala Ala Gln  
                     35                    40                    45  
 Glu Lys Asp Lys Gly Val Cys Gln Gly Trp His Cys Val Lys Lys Trp

50                                      55                                      60  
 Ala Cys Lys Gly Arg Ile Pro Gly Gln Pro Leu Gln Pro Gln Pro Leu  
 65                                      70                                      75                                      80  
 Gly Pro Tyr Leu Arg Ser Leu Ser Gln His Pro Ala Thr Gln Thr Pro  
    85                                      90                                      95  
 Arg Pro Gln Ala Arg Ala Ser Ser Arg Tyr Leu Glu Leu His Arg Ser  
    100                                      105                                      110  
 Gln Asn Arg Gly Gly Ser Glu Phe Lys Phe Trp Phe Cys Tyr Cys Leu  
    115                                      120                                      125  
 Ile Ala Cys Cys Arg Asp Ser Ile Ser Ser Ser Gly Lys Trp Glu  
    130                                      135                                      140

<210> 2724

<211> 347

<212> PRT

<213> Homo sapiens

<400> 2724

Met Pro Gln Ala Glu Leu Gly Ile Gln Val Cys Thr Cys Arg Leu Arg  
 1                                      5                                      10                                      15  
 Gly Ser Val Ser Arg Cys Cys Ser His Arg Glu Phe Arg Arg Gln Pro  
    20                                      25                                      30  
 Ser Pro Cys Ala Ala Gly Ile Gly Leu Leu His Leu Gly Ser Thr Ala  
    35                                      40                                      45  
 Ser Arg Gln Val Lys Pro Pro Arg Leu Pro Pro Pro Pro Trp Gly Arg  
    50                                      55                                      60  
 Ser Gly Glu Lys Leu Pro Phe Thr Pro Phe Pro Gly Cys Ser Leu Ser  
 65                                      70                                      75                                      80

Arg Trp His Ala Ser Pro Gln Thr Gln Val Ala Phe Gly Pro Arg Trp  
85 90 95  
Val Ser Leu Leu Pro Leu Pro His Thr Pro Ser Gly His Trp Asp Pro  
100 105 110  
Cys Pro Ser Asp Val Leu Gly Ser Arg Ser Gly Ala Ser His Cys Gly  
115 120 125  
Lys Arg Pro Gly Ala Trp Pro Glu Arg Gln Pro Arg Ala Gly Leu Ser  
130 135 140  
Pro Glu Ser Trp Ser Arg Ala Arg Glu Ala Pro Ile Pro Pro Arg Pro  
145 150 155 160  
Ala Ala Leu Ser Ala Val Ser Ser Ile Cys Ser Ser Phe His Pro Gln  
165 170 175  
Leu Cys Val Pro Val Ile Pro Pro Phe Ser Lys Ser Pro Val Pro Ile  
180 185 190  
Pro Ser Val Pro Thr His Ser Cys Ser Pro Lys Lys Ile Ser Tyr Arg  
195 200 205  
Cys Ile Tyr Asn Leu Trp Ile Arg Gly Leu Ser Ile Tyr Tyr Tyr Trp  
210 215 220  
Leu Ile Ile Ile Asn Tyr Val Asn Leu Pro Pro Val Cys Leu Leu Arg  
225 230 235 240  
Trp Val Ser Glu Glu Thr Leu Gly Glu Glu Asp Ala Leu Ala Ser Arg  
245 250 255  
Phe Ser Pro Pro Thr Pro Val Leu Ser Gly Arg Gln Trp Ser Gly Ala  
260 265 270  
Thr Gly Trp Ala Pro Phe Ser Leu Pro Pro Ser Pro Cys Pro Phe Cys  
275 280 285  
Arg Pro Leu Arg Gly Ala Val Cys Leu Ser Leu Ser Leu Leu Pro Leu  
290 295 300  
Leu Arg His Trp Leu Pro Gln Ser Glu Gln Pro Ala Gly Gly Arg Arg

305                      310                      315                      320  
 Ser Cys Val Gly His Cys Leu Leu Gln Cys Cys Arg Arg Arg Ala Glu  
                          325                      330                      335  
 Ala Pro Pro Gly Gly Phe His Leu Thr Gln Pro  
                          340                      345

<210> 2725

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2725

Met Pro Arg Arg Arg Pro Asn Pro Thr Leu Gly Arg Gly Tyr Arg Asp  
     1                      5                      10                      15  
 Arg Trp Gly Ser Ala Gly Ala Asp Val Gly Thr Val Ser Phe Pro Leu  
                          20                      25                      30  
 Ala Pro Ala Arg Cys Phe Gly Ser Gly His Arg Glu Ala Thr Val Ala  
                          35                      40                      45  
 Arg Arg His Ser Leu Thr Glu Val Ser Leu Ser Pro Ala Pro Ser Thr  
                          50                      55                      60  
 Trp Pro Gly Ala Cys Asn Ala Val Pro Thr Gly Gly Met Asn Gln Asn  
     65                      70                      75                      80  
 Pro Arg Leu Pro Ser Arg Ser Ser Arg Pro Val Pro Thr Ser Ser Leu  
                          85                      90                      95  
 Pro Ala Cys Gly Asp Phe Glu Ala Leu Ala Thr Ile Asn Tyr Phe Gln  
                          100                      105                      110  
 Ala His Ser Val Leu Ser Ser Pro Gly Pro Gln Leu Thr Ala Asn His  
                          115                      120                      125

&lt;210&gt; 2726

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2726

Met Leu Val Arg Pro Val Leu Asn Ser Arg Pro Gln Val Val His Pro

1 5 10 15

Leu Trp Pro Pro Lys Met Leu Gly Leu Gln Ala Leu Ala Thr Thr Pro

20 25 30

Gly Leu Phe Ile Tyr Leu Leu Met Val Phe Phe Phe Phe Phe Phe Phe

35 40 45

Phe Phe Glu Met Glu Ser Cys Ser Ile Val Gln Ala Gly Val Gln Cys

50 55 60

His Asp Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Leu Phe

65 70 75 80

Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Arg Leu Gln Pro

85 90 95

His Leu Ala Asp Phe Cys Ile Phe Ser Arg Asp Gly Val Leu Pro Tyr

100 105 110

Trp Ser Gly Trp Ser Gln Ile Pro Asp Val Arg

115 120

&lt;210&gt; 2727

&lt;211&gt; 208

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2727

Met Ala Thr Ser Ala Val Pro Ser Asp Asn Leu Pro Thr Tyr Lys Leu  
1 5 10 15  
Val Val Val Gly Asp Gly Gly Val Gly Lys Ser Ala Leu Thr Ile Gln  
20 25 30  
Phe Phe Gln Lys Ile Phe Val Pro Asp Tyr Asp Pro Thr Ile Glu Asp  
35 40 45  
Ser Tyr Leu Lys His Thr Glu Ile Asp Asn Gln Trp Ala Ile Leu Asp  
50 55 60  
Val Leu Asp Thr Ala Gly Gln Glu Glu Phe Ser Ala Met Arg Glu Gln  
65 70 75 80  
Tyr Met Arg Thr Gly Asp Gly Phe Leu Ile Val Tyr Ser Val Thr Asp  
85 90 95  
Lys Ala Ser Phe Glu His Val Asp Arg Phe His Gln Leu Ile Leu Arg  
100 105 110  
Val Lys Asp Arg Glu Ser Phe Pro Met Ile Leu Val Ala Asn Lys Val  
115 120 125  
Asp Leu Met His Leu Arg Lys Ile Thr Arg Glu Gln Gly Lys Glu Met  
130 135 140  
Ala Thr Lys His Asn Ile Pro Tyr Ile Glu Thr Ser Ala Lys Asp Pro  
145 150 155 160  
Pro Leu Asn Val Asp Lys Ala Phe His Asp Leu Val Arg Val Ile Arg  
165 170 175  
Gln Gln Ile Pro Glu Lys Ser Gln Lys Lys Lys Lys Lys Thr Lys Trp  
180 185 190  
Arg Gly Asp Arg Ala Thr Gly Thr His Lys Leu Gln Cys Val Ile Leu  
195 200 205

&lt;210&gt; 2728

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2728

Met Thr Cys Asn Val Glu His Leu Phe Ile Cys Leu Phe Ser Ile Cys

1 5 10 15

Ile Tyr Ser Leu Met Arg Cys Leu Phe Arg Ser Phe Val His Phe Lys

20 25 30

Ile Arg Leu Phe Ile Phe Leu Leu Gly Phe Gln Leu Phe Cys Ile Leu

35 40 45

Asp Asn Ser Ser Leu Ser Asp Met Ser Phe Ala Lys Phe Phe Phe Pro

50 55 60

Val Trp Gly Trp Phe Ser His Leu Phe Ser Thr Phe Ser Lys Arg Lys

65 70 75 80

Tyr Ile Asn Met Thr Val Gly Lys Ile Ala Met Arg Arg His Arg Val

85 90 95

Ala Leu Ile Ser Arg Asn Ile Thr Pro Pro

100 105

&lt;210&gt; 2729

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2729

Met	Pro	Ser	Arg	Pro	Trp	Leu	Leu	Ser	Pro	Val	Ser	His	Gly	Thr	Gln
1				5					10					15	
Glu	Trp	Pro	Phe	Pro	Tyr	Leu	Gln	Ala	Ser	Val	Ser	His	Pro	Phe	Ser
				20				25						30	
Glu	Asp	Ala	Gly	Leu	Phe	Phe	Phe	Phe	Leu	Arg	Arg	Ser	Leu	Ala	Leu
				35				40						45	
Ser	Pro	Arg	Leu	Glu	Cys	Ser	Gly	Val	Ile	Ser	Ala	His	Cys	Lys	Pro
				50				55						60	
Arg	Leu	Pro	Gly	Ser	Arg	His	Ser	Pro	Ala	Ser	Ala	Ser	Arg	Val	Ala
				65				70						75	
Gly	Thr	Thr	Gly	Ala	Arg	His	His	Ala	Trp	Leu	Ile	Phe	Cys	Ile	Phe
								85						90	
Ser	Arg	Asp	Gly	Val	Ser	Leu	Leu	Ala	Arg	Met	Val	Ser	Ile	Ser	
								100						105	
															110

&lt;210&gt; 2730

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2730

Met	Ile	His	Glu	Tyr	His	Val	Pro	Ile	Arg	Leu	Ile	Ile	Gly	Leu	Tyr
1						5					10				15
Val	Leu	Met	Ile	His	Glu	Tyr	His	Val	Pro	Ile	Arg	Leu	Ile	Ile	Gly
								20						25	
Leu	Tyr	Asp	Phe	Asn	Val	Phe	Val	Phe	Leu	Ser	Cys	Val	Ser	Ile	Phe
														35	
															40
															45

Lys Ser Lys Leu Arg Arg Cys Val Ala Trp Tyr Tyr Leu Leu Gln Ile  
 50 55 60  
 Tyr Leu Lys Phe Val Asn Ile Phe Gln Asp Phe Cys Gln Pro Phe His  
 65 70 75 80  
 Asn Pro Val Ile Asn Asn Leu Leu Val Asn Lys Asn Val Gly Ala Ser  
 85 90 95  
 Arg Leu Asn Gln Ile Tyr Phe Ser Leu Ser Leu Ile Tyr Ile Cys Ile  
 100 105 110  
 Asn Ile Asn Asn Ser Ile His Leu Phe His Gln Asn Asn Ser Lys Val  
 115 120 125  
 Gly

<210> 2731

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2731

Met Glu Leu Phe Glu Gly Arg Gly Ile Ser Glu Glu Gly Leu Arg Asp  
 1 5 10 15  
 Ser Pro Phe Val Gly Leu Gly His Gln Val Gly Glu Ser Gly Ala Ala  
 20 25 30  
 Gly Thr Leu Glu Gly Leu Ala Glu Pro Ala Phe Pro Val His Pro Ser  
 35 40 45  
 Gly Arg Ala Gly Ser Arg Cys Arg Leu Pro Ile Ser Ser Leu Ser Ser  
 50 55 60  
 Gly Thr Ala Pro Met Pro Pro Trp Leu Ala Trp Glu Pro Ile Leu Pro

65	70	75	80
Arg Leu Gly Val Asn Lys Gln Arg Thr Cys Lys Glu Ser Leu Met Gly			
	85	90	95
Cys Thr Ala Leu Pro Asn Pro Ala Gln Gly Arg Val Leu Leu Phe Val			
	100	105	110
Val Trp			

&lt;210&gt; 2732

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

Met Phe Val Asp Pro Gln Val Phe Pro Gly Lys Thr Thr Arg Lys Gly			
1	5	10	15
Gln Ala Asp Ala Arg Asp Gly Phe Pro Trp Ser Trp Ala Ala Pro Pro			
	20	25	30
Leu Trp Leu Cys Arg Val Gln Ser Pro Ser Trp Leu Leu Ser Trp Ala			
	35	40	45
Gly Ile Glu Cys Leu Gln Leu Phe Gln Val His Ser Ala Ser Tyr Arg			
50	55	60	
Trp Ile Tyr Leu Ser Gly Ala Cys Asp Glu Lys Gly Cys Arg Glu Asp			
65	70	75	80
Leu Ser His Ala Leu Glu Ala Phe Phe Leu Leu Ser Trp Gly Leu Thr			
	85	90	95
Phe Gly Tyr Leu Leu Leu Thr Gln Ile Ser Ala Thr Gly Leu Asn Phe			
	100	105	110

Ser Ser Glu Asn Gly Ile Phe Leu Phe Tyr His Ile Val Arg Leu Gln

115

120

125

Ile Phe Arg Thr Phe Met Leu Cys Phe Pro Tyr Lys Thr Glu Cys Leu

130

135

140

<210> 2733

<211> 474

<212> PRT

<213> Homo sapiens

<400> 2733

Met Asp Arg Asn Pro Ser Pro Pro Pro Pro Pro Gly Arg Asp Lys Glu

1

5

10

15

Glu Glu Glu Glu Val Ala Gly Gly Asp Cys Ile Gly Ser Thr Val Tyr

20

25

30

Ser Lys His Trp Leu Phe Gly Val Leu Ser Gly Leu Ile Gln Ile Val

35

40

45

Ser Pro Glu Asn Thr Lys Ser Ser Ser Asp Asp Glu Glu Gln Leu Thr

50

55

60

Glu Leu Asp Glu Glu Met Glu Asn Glu Ile Cys Arg Val Trp Asp Met

65

70

75

80

Ser Met Asp Glu Asp Val Ala Leu Phe Leu Gln Glu Phe Asn Ala Pro

85

90

95

Asp Ile Phe Met Gly Val Leu Ala Lys Ser Lys Cys Pro Arg Leu Arg

100

105

110

Glu Ile Cys Val Gly Ile Leu Gly Asn Met Ala Cys Phe Gln Glu Ile

115

120

125

Cys Val Ser Ile Ser Ser Asp Lys Asn Leu Gly Gln Val Leu Leu His

130 135 140  
Cys Leu Tyr Asp Ser Asp Pro Pro Thr Leu Leu Glu Thr Ser Arg Leu  
145 150 155 160  
Leu Leu Thr Cys Leu Ser Gln Ala Glu Val Ala Ser Val Trp Val Glu  
165 170 175  
Arg Ile Gln Glu His Pro Ala Ile Tyr Asp Ser Ile Cys Phe Ile Met  
180 185 190  
Ser Ser Ser Thr Asn Val Asp Leu Leu Val Lys Val Gly Glu Val Val  
195 200 205  
Asp Lys Leu Phe Asp Leu Asp Glu Lys Leu Met Leu Glu Trp Val Arg  
210 215 220  
Asn Gly Ala Ala Gln Pro Leu Asp Gln Pro Gln Glu Glu Ser Glu Glu  
225 230 235 240  
Gln Pro Val Phe Arg Leu Val Pro Cys Ile Leu Glu Ala Ala Lys Gln  
245 250 255  
Val Arg Ser Glu Asn Pro Glu Trp Leu Asp Val Tyr Met His Ile Leu  
260 265 270  
Gln Leu Leu Thr Thr Val Asp Asp Gly Ile Gln Ala Ile Val His Cys  
275 280 285  
Pro Asp Thr Gly Lys Asp Ile Trp Asn Leu Leu Phe Asp Leu Val Cys  
290 295 300  
His Glu Phe Cys Gln Ser Asp Asp Pro Pro Ile Ile Leu Gln Glu Gln  
305 310 315 320  
Lys Thr Val Leu Ala Ser Val Phe Ser Val Leu Ser Ala Ile Tyr Ala  
325 330 335  
Ser Gln Thr Glu Gln Glu Tyr Leu Lys Ile Glu Lys Asp Leu Pro Leu  
340 345 350  
Ile Asp Ser Leu Ile Arg Val Leu Gln Asn Met Glu Gln Cys Gln Lys  
355 360 365

Lys Pro Glu Asn Ser Ala Glu Ser Asn Thr Glu Glu Thr Lys Arg Thr  
 370 375 380

Asp Leu Thr Gln Asp Asp Phe His Leu Lys Ile Leu Lys Asp Ile Leu  
 385 390 395 400

Cys Glu Phe Leu Ser Asn Ile Phe Gln Ala Leu Thr Lys Glu Thr Val  
 405 410 415

Ala Gln Gly Val Lys Glu Gly Gln Leu Ser Lys Gln Lys Cys Ser Ser  
 420 425 430

Ala Phe Gln Asn Leu Leu Pro Phe Tyr Ser Pro Val Val Glu Asp Phe  
 435 440 445

Ile Lys Ile Leu Arg Glu Val Asp Lys Ala Leu Ala Asp Asp Leu Glu  
 450 455 460

Lys Asn Phe Pro Ser Leu Lys Val Gln Thr  
 465 470

<210> 2734

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2734

Met Gln Lys Phe Arg Lys Met Asn Glu Thr His Tyr Tyr Tyr Ser Phe  
 1 5 10 15

Ser Pro Trp Leu Ser Ser Ser Val Thr Ala Pro Ser Met Val Ala Pro  
 20 25 30

Val Thr Phe Ala Ser Ile Val Glu Glu Glu Leu Gln Gln Glu Ala Ala  
 35 40 45

Leu Ile Arg Ser Arg Glu Lys Pro Leu Ala Leu Ile Gln Ile Glu Glu



50                      55                      60  
 His Ala Ile Gln Asp Leu Leu Val Phe Tyr Glu Ala Phe Gly Asn Pro  
 65                      70                      75                      80  
 Glu Glu Phe Val Ile Val Glu Arg Thr Pro Gln Gly Pro Leu Ala Val  
                          85                      90                      95  
 Pro Met Trp Asn Lys His Gly Cys  
                          100

<210> 2735

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2735

Met Asn Gly Ala Gly Phe Leu Lys His Cys Leu Glu Glu Arg Gln Gln  
 1                      5                      10                      15  
 Lys Cys Leu Met Asn Pro Thr Gly Leu Leu Gly Cys Ser Pro Leu Glu  
                          20                      25                      30  
 Thr Ser Asn Asn Val Cys Arg Asn Pro Gly His Val Glu Arg Pro His  
                          35                      40                      45  
 Ile Arg Val Gln Leu Arg Ser Gln Leu Thr Ala Gly Ile Asp Ile Met  
                          50                      55                      60  
 Phe Thr Leu Gly Glu Ala Ser Cys His Ala Val Arg Thr Leu Gly Gln  
 65                      70                      75                      80  
 Ser Tyr Glu Glu Ala Arg Val Val Arg Lys Arg Gly Leu Gln Pro Thr  
                          85                      90                      95  
 Ala Ile Asp Gly Val Leu Leu Cys Phe Pro Val Gly Val Gln  
                          100                      105                      110

&lt;210&gt; 2736

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2736

Met Cys Thr Val Asp Val Glu Gly Phe Asp Asp Val Gly Glu Thr Leu

1 5 10 15

Ser Asp Ala Val Arg Asp Gly Leu Gly Thr Ile Leu Arg Gly Gly Ala

20 25 30

Glu Glu Gly Ser Tyr Asp Asn Trp Pro His Thr Arg Lys Ser Trp Gly

35 40 45

Pro Leu Ser Pro Gly His Gln Arg Glu Leu Trp Thr Gln Pro Asp Pro

50 55 60

Trp Thr Glu Val Leu Ser Gly His Lys Gly Asp Ala Gly Ala Cys Gly

65 70 75 80

Cys Cys Cys Phe Cys Ser Gln Phe Ile Asn Ala Arg Cys Ala His Pro

85 90 95

Leu Cys Leu Ala Arg Gly Leu Asp Arg Arg Ala Ser Glu Glu Met Pro

100 105 110

Ile Leu Gln Ala Leu Cys Leu Leu Pro Lys Val Ser Thr Arg Ser Ile

115 120 125

Thr Val Pro Ser Pro Gln Arg Ser Ala Pro Arg Ala Ser Leu Cys Pro

130 135 140

Pro His Lys Gly Lys Ser Pro

145 150

&lt;210&gt; 2737

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2737

Met Val Pro Val Phe Thr Ser Ser Ala Leu Pro Val Lys Asp Val Glu

1 5 10 15

Asp Lys Pro Glu Gln Gln Thr Arg Thr Arg Glu Thr Asp Lys Ser Pro

20 25 30

Thr Ser Thr Glu Pro Arg Gln Gln Pro Ser Ala Leu Phe Ala Arg Gly

35 40 45

Asn Arg Lys Ala Val Lys Ser Pro Gln Arg Ser Ser Ser Lys Ile Lys

50 55 60

Glu Asn Lys His Pro Phe Ala Leu Tyr Gly Trp Gly Glu Lys Gln Thr

65 70 75 80

Asp Thr Gly Ser Gln Lys Thr His Asn Val Cys Ala Ser Ala Pro Val

85 90 95

His Glu Ile His Glu Ser Ala Leu Arg Ala Lys Asn Arg Arg Gln Val

100 105 110

Glu Lys Arg Lys Leu Val Ala Gln Arg Gln Arg Ala His Ser Val Asp

115 120 125

Val Glu Lys Asn Arg Lys Met Lys Ala Ser Ser Ser Glu Asn Pro Trp

130 135 140

Met Thr Glu Tyr Met Arg Cys Tyr Ser Ala Arg Ala

145 150 155

&lt;210&gt; 2738

&lt;211&gt; 676

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

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Met Val Ser Asn Lys Glu Met Pro Lys Glu Pro Glu Asp Thr Tyr Ala
  1              5              10              15
Lys Gly Glu Asp Phe Thr Val Thr Ser Lys Pro Ala Gly Leu Ser Glu
              20              25              30
Asp Gln Lys Thr Ala Phe Ser Ile Ile Ser Glu Gly Cys Glu Ile Leu
              35              40              45
Asn Ile His Ala Pro Ala Phe Ile Ser Ser Ile Asp Gln Glu Glu Ser
              50              55              60
Glu Gln Met Gln Asp Lys Leu Glu Tyr Leu Glu Glu Lys Ala Ser Phe
              65              70              75              80
Lys Thr Ile Pro Leu Pro Asp Asp Ser Glu Thr Val Ala Cys His Lys
              85              90              95
Thr Leu Lys Ser Arg Leu Glu Asp Glu Lys Val Thr Pro Leu Lys Glu
              100             105             110
Asn Lys Gln Lys Glu Thr His Lys Thr Lys Glu Glu Ile Ser Thr Asp
              115             120             125
Ser Glu Thr Asp Leu Ser Phe Ile Gln Pro Thr Ile Pro Ser Glu Glu
              130             135             140
Asp Tyr Phe Glu Lys Tyr Thr Leu Ile Asp Tyr Asn Ile Ser Pro Asp
              145             150             155             160
Pro Glu Lys Gln Lys Ala Pro Gln Lys Leu Asn Val Glu Glu Lys Leu
              165             170             175
Ser Lys Glu Val Thr Glu Glu Thr Ile Ser Phe Pro Val Ser Ser Val

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180	185	190
Glu Ser Ala Leu Glu His Glu Tyr Asp Leu Val Lys Leu Asp Glu Ser		
195	200	205
Phe Tyr Gly Pro Glu Lys Gly His Asn Ile Leu Ser His Pro Glu Thr		
210	215	220
Gln Ser Gln Asn Ser Ala Asp Arg Asn Val Ser Lys Asp Thr Lys Arg		
225	230	235
240		
Asp Val Asp Ser Lys Ser Pro Gly Met Pro Leu Phe Glu Ala Glu Glu		
245	250	255
Gly Val Leu Ser Arg Thr Gln Ile Phe Pro Thr Thr Ile Lys Val Ile		
260	265	270
Asp Pro Glu Phe Leu Glu Glu Pro Pro Ala Leu Ala Phe Leu Tyr Lys		
275	280	285
Asp Leu Tyr Glu Glu Ala Val Gly Glu Lys Lys Lys Glu Glu Glu Thr		
290	295	300
Ala Ser Glu Gly Asp Ser Val Asn Ser Glu Ala Ser Phe Pro Ser Arg		
305	310	315
320		
Asn Ser Asp Thr Asp Asp Gly Thr Gly Ile Tyr Phe Glu Lys Tyr Ile		
325	330	335
Leu Lys Asp Asp Ile Leu His Asp Thr Ser Leu Thr Gln Lys Asp Gln		
340	345	350
Gly Gln Gly Leu Glu Glu Lys Arg Val Gly Lys Asp Asp Ser Tyr Gln		
355	360	365
Pro Ile Ala Ala Glu Gly Glu Ile Trp Gly Lys Phe Gly Thr Ile Cys		
370	375	380
Arg Glu Lys Ser Leu Glu Glu Gln Lys Gly Val Tyr Gly Glu Gly Glu		
385	390	395
400		
Ser Val Asp His Val Glu Thr Val Gly Asn Val Ala Met Gln Lys Lys		
405	410	415

Ala Pro Ile Thr Glu Asp Val Arg Val Ala Thr Gln Lys Ile Ser Tyr  
420 425 430

Ala Val Pro Phe Glu Asp Thr His His Val Leu Glu Arg Ala Asp Glu  
435 440 445

Ala Gly Ser Gln Gly Asn Glu Val Gly Asn Ala Ser Pro Glu Val Asn  
450 455 460

Leu Asn Val Pro Val Gln Val Ser Phe Pro Glu Glu Glu Phe Ala Ser  
465 470 475 480

Gly Ala Thr His Val Gln Glu Thr Ser Leu Glu Glu Pro Lys Ile Leu  
485 490 495

Val Pro Pro Glu Pro Ser Glu Glu Arg Leu Arg Asn Ser Pro Val Gln  
500 505 510

Asp Glu Tyr Glu Phe Thr Glu Ser Leu His Asn Glu Val Val Pro Gln  
515 520 525

Asp Ile Leu Ser Glu Glu Leu Ser Ser Glu Ser Thr Pro Glu Asp Val  
530 535 540

Leu Ser Gln Gly Lys Glu Ser Phe Glu His Ile Ser Glu Asn Glu Phe  
545 550 555 560

Ala Ser Glu Ala Glu Gln Ser Thr Pro Ala Glu Gln Lys Glu Leu Gly  
565 570 575

Ser Glu Arg Lys Glu Glu Asp Gln Leu Ser Ser Glu Val Val Thr Glu  
580 585 590

Lys Ala Gln Lys Glu Leu Lys Lys Ser Gln Ile Asp Thr Tyr Cys Tyr  
595 600 605

Thr Cys Lys Cys Pro Ile Ser Ala Thr Asp Lys Val Phe Gly Thr His  
610 615 620

Lys Asp His Glu Val Ser Thr Leu Asp Thr Ala Ile Ser Ala Val Lys  
625 630 635 640

Val Gln Leu Ala Glu Phe Leu Glu Asn Leu Gln Glu Lys Ser Leu Arg

	645	650	655
Ile Glu Ala Phe Val Ser Glu Ile Glu Ser Phe Phe Asn Thr Ile Glu			
660	665	670	
Glu Asn Cys Ser			
675			

&lt;210&gt; 2739

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

Met Arg Ser Asn Ser Thr Leu Asn Lys His Asn Glu Asn Tyr Lys Gln			
1	5	10	15
Lys Lys Leu Gly Glu Pro Ser Cys Asn Lys Leu Lys Asn Ile Leu Tyr			
20	25	30	
Asn Gly Ser Asn Ile Gln Leu Ser Lys Ile Cys Leu Ser His Ser Glu			
35	40	45	
Glu Phe Ile Lys Lys Glu Pro Leu Ser Asp Thr Thr Ser Gln Cys Met			
50	55	60	
Lys Asp Val Gln Ile Ile Leu Asp Ser Asn Ile Thr Lys Asp Thr Asn			
65	70	75	80
Val Asp Lys Val Gln Leu Gln Asn Cys Lys Trp Tyr Gln Glu Asn Ala			
85	90	95	
Leu Leu Asp Lys Val Thr Asp Ala Glu Ile Lys Lys Gly Leu Leu His			
100	105	110	
Cys Thr Gln Lys Lys Ile Val Pro Gly His Ser Asn Val Pro Val Ser			
115	120	125	

Ser Ser Ala Ala Glu Lys Glu Glu Glu Val His Ala Arg Leu Leu His  
 130 135 140  
 Cys Val Ser Lys Gln Lys Ile Leu Leu Ser Gln Ala Arg Arg Thr Gln  
 145 150 155 160  
 Lys His Leu Gln Met Leu Leu Ala Lys His Val Val Lys His Tyr Gly  
 165 170 175  
 Gln Gln Met Lys Leu Ser Met Lys His Gln Leu Pro Lys Met Lys Thr  
 180 185 190  
 Phe His Glu Pro Thr Thr Ile Leu Gly Asn Ser Leu Pro Lys Cys Thr  
 195 200 205  
 Glu Ile Lys Pro Glu Val Asn Thr Leu Thr Ala Glu Asn Lys Leu Trp  
 210 215 220  
 Asp Asp Ala Lys Asn Gly Phe Ala Arg Cys Thr Ala Ala Glu Ile Gln  
 225 230 235 240  
 Arg Phe Ala Phe Ser Ala Thr Gly Leu Leu Ser His Val Glu Glu Gly  
 245 250 255  
 Leu Asp Ser Asp Ala Thr Asp Ser Ser Ser Asp Asp Asp Leu Asp Glu  
 260 265 270  
 Tyr Thr Leu Arg Lys Asn Val Ala Val  
 275 280

&lt;210&gt; 2740

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

Met Pro Gly Ile Lys Val Gly Arg Ser Arg Ala Gln Leu Pro Leu Lys



1	5	10	15
Val Glu Val Glu Glu Val Thr Val Pro Glu Gly Phe Val Gln Lys Leu			
20	25	30	
Asn Asp His Leu Leu Leu Val Tyr Thr Gly Lys Thr Arg Leu Ala Arg			
35	40	45	
Asn Leu Leu Gln Asp Val Leu Arg Ser Trp Tyr Ala Arg Leu Pro Ala			
50	55	60	
Val Val Gln Asn Ala His Ser Leu Val Arg Gln Thr Glu Glu Cys Ala			
65	70	75	80
Glu Gly Phe Arg Gln Gly Glu Gly Leu Pro Leu Gly Gly Ser Gly His			
85	90	95	
Trp Glu Arg Val Phe Cys His Leu Trp Val			
100	105		

&lt;210&gt; 2741

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

Met His Pro His Gly Ser Pro Thr Leu His Arg Arg Lys Leu Arg Leu			
1	5	10	15
Val Arg Gly Val Leu Ser Cys Arg Thr Ser Trp Pro Asp Pro Arg Gln			
20	25	30	
Val Ser Leu Gln Ser Pro Ser Ser Ser Pro Pro His Arg Pro Thr Ser			
35	40	45	
Cys Trp Phe Gln Gly Arg Ser Pro Leu Cys Gln Ala Leu Ile Ser Trp			
50	55	60	

Trp Tyr Pro Glu Pro Met Leu Ser Pro Gln Glu Gly Thr Ala Gln Pro  
 65 70 75 80  
 Pro Ser Leu Ser Ala Gly Gln Lys His Leu Cys Val Thr Ser Leu Leu  
 85 90 95  
 Ile Cys Gln Gly Leu Leu Trp Val Gly Thr Asp Gln Gly Val Ile Val  
 100 105 110  
 Leu Leu Pro Val Pro Arg Leu Glu Gly Ile Pro Lys Ile Thr Gly Lys  
 115 120 125  
 Gly Met Val Ser Leu Asn Gly His Cys Gly Pro Val Ala Phe Leu Ala  
 130 135 140  
 Val Ala Thr Ser Ile Leu Ala Pro Asp Ile Leu Arg Ser Asp Gln Glu  
 145 150 155 160  
 Glu Ala Glu Gly Pro Arg Ala Glu Glu Asp Lys Pro Asp Gly Gln Ala  
 165 170 175  
 His Glu Pro Met Pro Asp Ser His Val Gly Arg Glu Leu Thr Arg Lys  
 180 185 190  
 Lys Gly Ile Leu Leu Gln Tyr Arg Leu Arg Ser Thr Ala His Leu Pro  
 195 200 205  
 Gly Pro Leu Leu Ser Met Arg Glu Pro Ala Pro Ala Asp Gly Ala Ala  
 210 215 220  
 Leu Glu His Ser Glu Glu Asp Gly Ser Ile Tyr Glu Met Ala Asp Asp  
 225 230 235 240  
 Pro Asp Val Trp Val Arg Ser Arg Pro Cys Ala Arg Asp Ala His Arg  
 245 250 255  
 Lys Glu Ile Cys Ser Val Ala Ile Ile Ser Gly Gly Gln Gly Tyr Arg  
 260 265 270  
 Asn Phe Gly Ser Ala Leu Gly Ser Ser Gly Arg Gln Ala Pro Cys Gly  
 275 280 285  
 Glu Thr Asp Ser Thr Leu Leu Ile Trp Gln Val Pro Leu Met Leu

290

295

300

&lt;210&gt; 2742

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2742

Met Pro Ser Ser Leu Gly Leu Cys Ile Cys Ile Ser Phe Ser Phe Leu

1

5

10

15

Leu Tyr Thr Ala Ala Phe Gln Phe Phe Leu Val Phe Leu Ser Leu Pro

20

25

30

Pro Ala Ser Ser Trp Ser Leu Ser Cys Ser Val Ile Leu Leu Ser Leu

35

40

45

Ile Ser Cys Pro Gln Val Ser Val Gly Leu Cys Ser Pro Ala Ala His

50

55

60

Ser Cys His Gly Thr His His Cys Phe Gln Leu Phe Pro Thr Ser Tyr

65

70

75

80

Pro Asn Tyr Ala Ile Val Pro Ile Ser Thr Leu Ile Gln Ala Arg Gln

85

90

95

Lys Ala Val Pro Trp Ala Ala Pro His Lys Pro Glu His Cys Arg Ser

100

105

110

Val Ser Phe Phe Thr Leu Cys Pro Glu Gly Arg Ala Arg Val Val Phe

115

120

125

Phe

&lt;210&gt; 2743

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2743

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Met Ala Asp Glu Glu Ala Glu Gln Glu Arg Leu Ser Cys Gly Glu Gly
  1             5             10             15
Gly Cys Val Ala Glu Leu Gln Arg Leu Gly Glu Arg Leu Gln Glu Leu
             20             25             30
Glu Leu Gln Leu Arg Glu Ser Arg Val Pro Ala Val Glu Ala Ala Thr
             35             40             45
Asp Tyr Cys Gln Gln Leu Cys Gln Thr Leu Leu Glu Tyr Ala Glu Lys
             50             55             60
Trp Lys Thr Ser Glu Asp Pro Leu Pro Leu Leu Glu Val Tyr Thr Val
             65             70             75             80
Ala Ile Gln Ser Tyr Val Lys Ala Arg Pro Tyr Leu Thr Ser Glu Cys
             85             90             95
Glu Asn Val Ala Leu Val Leu Glu Arg Leu Ala Leu Ser Cys Val Glu
             100            105            110
Leu Leu Leu Cys Leu Pro Val Glu Leu Ser Asp Lys Gln Trp Glu Gln
             115            120            125
Phe Gln Thr Leu Val Gln Val Ala His Glu Lys Leu Met Glu Asn Gly
             130            135            140
Ser Cys Glu Leu His Phe Leu Ala Thr Leu Ala Gln Glu Thr Gly Val
             145            150            155            160
Trp Lys Asn Pro Val Leu Cys Thr Ile Leu Ser Gln Glu Pro Leu Asp
             165            170            175
Lys Asp Lys Gly Phe His Pro Gly Tyr His Ile Thr Phe Ser Arg His

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180 185 190  
Val Phe Leu Gly Ser Ser Trp Leu  
195 200

<210> 2744

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2744

Met Glu Met Gly Gly Val Trp Gly Lys Ser Arg Ser Leu Ser Gly Ser  
1 5 10 15  
Ala Pro Ala Val Lys Tyr Leu Ala Cys Cys Ser Val Pro Val Ser Ser  
20 25 30  
Thr Gln Ala Gly Leu Pro Asp His Ser Ala Leu Ser Ala Pro Pro Trp  
35 40 45  
Leu Trp Ser Glu Pro Val Glu Arg Gly Thr Leu Ser Gln Gly Pro Ser  
50 55 60  
His Ile Ala Ala Ala Ala Pro Ser Val Ser Ser Leu His Leu Leu  
65 70 75 80  
Thr Gly Pro Pro Ala Arg His Leu Leu His Ser Thr Thr Ile Thr Trp  
85 90 95  
Val Leu Leu Ala Leu Ala Trp Leu Ala Tyr Leu Val Ile Lys Ser  
100 105 110

<210> 2745

<211> 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2745

Met Gly Gln Gly Lys Arg Val Asp Leu Gly Leu Gln Ser Pro Cys Ala

1 5 10 15

Leu Ser Gln Trp Asn Phe Pro Leu Leu Met Leu Val Trp Lys Leu Ala

20 25 30

Pro Ala Leu Cys Cys Gly Asn Thr Met Val Leu Lys Pro Ala Glu Gln

35 40 45

Thr Pro Leu Thr Ala Leu Tyr Leu Gly Ser Leu Ile Lys Glu Val Arg

50 55 60

His Pro Lys Arg Lys Tyr His Met Phe Leu Val Thr Phe Pro Leu Leu

65 70 75 80

Gly Thr Arg Pro Pro Ser Arg Asp Gly Thr Val Ala Asp Cys Trp Gln

85 90 95

Ser Ser Gly Lys Gly Met Thr Ser Ser Val Leu Phe Gly Asp Cys Thr

100 105 110

Phe Phe Leu Leu Leu Val Ala Thr Glu Leu Glu Lys Leu His Ser Ser

115 120 125

Gln Trp Ser

130

&lt;210&gt; 2746

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2746

Met Glu Ile Leu Asn Val Thr Leu Val Pro Tyr Gly Asn Ala Gln Glu

1 5 10 15

Gln Asn Val Ser Gly Arg Trp Glu Phe Lys Cys Gln His Gly Glu Glu

20 25 30

Glu Cys Lys Phe Asn Lys Val Glu Ala Cys Val Leu Asp Glu Leu Asp

35 40 45

Met Glu Leu Ala Phe Leu Thr Ile Val Cys Met Glu Glu Phe Glu Asp

50 55 60

Met Glu Arg Ser Leu Pro Leu Cys Leu Gln Leu Tyr Ala Pro Gly Leu

65 70 75 80

Ser Pro Asp Thr Ile Met Glu Cys Ala Met Gly Asp Arg Gly Met Gln

85 90 95

Leu Met His Ala Asn Ala Gln Arg Thr Asp Ala Leu Gln Pro Pro His

100 105 110

Glu Tyr Val Pro Trp Val Thr Val Asn Gly Val Arg Ile Phe Leu Ala

115 120 125

Leu Ser Leu Thr Leu Ile Val Pro Trp Ser Gln Gly Trp Thr Arg Gln

130 135 140

Arg Asp Gln Arg

145

&lt;210&gt; 2747

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2747

Met Gln Arg Ala Gly Asn Pro Val Leu Thr Leu Pro Gly Met Pro Phe  
 1 5 10 15  
 Gly Lys Thr Ser Val Pro Glu Ala Glu Gly Gln Cys Leu Leu Leu Pro  
 20 25 30  
 Gly Ala Gln Leu Leu Ser Gly Pro Gln Thr His Ala Ala Cys Pro Gly  
 35 40 45  
 Ala Ser Pro Asn Ser Phe Val Tyr Phe Pro Val Gly Asn Val Leu Ile  
 50 55 60  
 Pro Leu Gly Cys Lys Asp Gly Thr Thr Pro Glu Gly Trp Thr Val Ser  
 65 70 75 80  
 Arg Cys Pro Ala Asn Ile Cys Gly Ile Ser Ser Thr Gln Gln Gly Lys  
 85 90 95  
 Arg Trp Arg Gln Lys Pro Leu Gln Ala Pro Glu Gly Thr His Phe Pro  
 100 105 110  
 Asp Pro Val His Leu Pro Asp Pro Arg Pro Pro Pro  
 115 120

&lt;210&gt; 2748

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2748

Met Ser Leu Met Pro Lys Met His Leu Leu Phe Pro Leu Thr Leu Val  
 1 5 10 15  
 Arg Ser Phe Trp Ser Asp Met Met Asp Ser Ala Gln Ser Phe Ile Thr  
 20 25 30  
 Ser Ser Trp Thr Phe Tyr Leu Gln Ala Asp Asp Gly Lys Ile Val Ile



35 40 45  
Phe Gln Ser Lys Pro Glu Ile Gln Tyr Ala Pro His Leu Glu Gln Glu  
50 55 60  
Pro Thr Asn Leu Arg Glu Ser Ser Leu Ser Lys Met Ser Ser Asp Leu  
65 70 75 80  
Gln Met Arg Asn Ser Gln Ala His Arg Asn Phe Leu Glu Asp Gly Glu  
85 90 95  
Ser Asp Gly Phe Leu Arg Cys Leu Ser Leu Asn Ser Gly Trp Ile Leu  
100 105 110  
Thr Thr Thr Leu Val Leu Ser Val Met Val Leu Leu Trp Ile Cys Cys  
115 120 125  
Ala Thr Val Ala Thr Ala Val Glu Gln Tyr Val Pro Ser Glu Lys Leu  
130 135 140  
Ser Ile Tyr Gly Asp Leu Glu Phe Met Asn Glu Gln Lys Leu Asn Arg  
145 150 155 160  
Tyr Pro Ala Ser Ser Leu Val Val Val Arg Ser Lys Thr Glu Asp His  
165 170 175  
Glu Glu Ala Gly Pro Leu Pro Thr Lys Val Asn Leu Ala His Ser Glu  
180 185 190  
Ile

&lt;210&gt; 2749

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2749

Met Ser Val Leu Arg Pro Leu Asp Lys Leu Pro Gly Leu Asn Thr Ala  
 1 5 10 15  
 Thr Ile Leu Leu Val Gly Thr Glu Asp Ala Leu Leu Gln Gln Leu Ala  
 20 25 30  
 Asp Ser Met Leu Lys Glu Asp Cys Ala Ser Glu Leu Lys Val His Leu  
 35 40 45  
 Ala Lys Ser Leu Pro Leu Pro Ser Ser Val Asn Arg Pro Arg Ile Asp  
 50 55 60  
 Leu Ile Val Phe Val Val Asn Leu His Ser Lys Tyr Ser Leu Gln Asn  
 65 70 75 80  
 Thr Glu Glu Ser Leu Arg His Val Asp Ala Ser Phe Phe Leu Gly Lys  
 85 90 95  
 Val Cys Phe Leu Ala Thr Gly Gly Lys Tyr Val Pro Arg Leu Leu Leu  
 100 105 110  
 Pro Thr Pro Ser Gln Gly Lys Ala Gly Ala Ala Val Gly Phe Leu Leu  
 115 120 125  
 Arg His Pro Gly  
 130

&lt;210&gt; 2750

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2750

Met Thr Arg Arg Gly Val Cys Val Cys Val His Val Cys Ile Cys Val  
 1 5 10 15  
 Leu Val Cys Ser His Ser Ile Pro Leu Cys Ala Cys Val Leu Ala Ala

	20		25		30
Trp	Asp	Ser	Ala	Val	Phe
Trp	Glu	Gly	Gly	Gly	Glu
Leu	Ser	His	Val		
	35		40		45
Leu	Tyr	Tyr	Ile	Phe	Phe
Glu	Met	Gly	Ser	Cys	Ser
Val	Ala	Gln	Ala		
	50		55		60
Gly	Val	Gln	Trp	Cys	Asp
Leu	Ser	Ser	Leu	Gln	Leu
Leu	Pro	Pro	Gly		
	65		70		75
					80
Ser	Ser	Ser	Ser	Pro	Ala
Ser	Ala	Cys	Gln	Ile	Ala
Gly	Ile	Thr	Gly		
	85		90		95
Val	Tyr	His	His	Ser	Gln
Leu	Ile	Phe	Val	Phe	Leu
Val	Glu	Met	Gly		
	100		105		110
Phe	Tyr	His	Val	Gly	Gln
Ala	Gly	Leu	Glu	Leu	Leu
Ala	Ser	Gly	Asp		
	115		120		125
Pro	Pro	Ala	Leu	Ala	Ser
Gln	Ser	Ala	Glu	Ile	Thr
Gly	Val	Asn	Tyr		
	130		135		140
Arg	Ala	Trp	Pro	His	Val
Leu	Tyr	Phe	Phe	Gln	Val
Ile	Leu	Lys	Ser		
	145		150		155
					160
Thr	Thr	Arg	Asn	Val	Gly
Met	Gly	Phe	Gly	Met	Tyr
Asn	Gly	Asn	Arg		
	165		170		175

&lt;210&gt; 2751

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2751

Met	Phe	Ala	Glu	Gln	Met	Asn	Ala	Trp	Ser	Arg	Pro	Gln	Ser	Arg	Val
1					5						10				15

Trp Trp Gln Gly Gly Ser Gly Arg Glu Phe Thr Gln Gln Pro Gly Asp  
                     20                    25                    30  
 Arg Gly Glu Gln Glu Ala Arg Gly Tyr Pro Ser Met Ser Gly Thr Arg  
                     35                    40                    45  
 Gly Pro Trp Trp Ala Ala Val Trp Glu Thr His Gly Ser Trp Pro His  
                     50                    55                    60  
 Leu Arg Pro Pro Ser Ser Leu Ile Thr Cys Leu Pro Pro Leu Gln Arg  
                     65                    70                    75                    80  
 Phe Arg Phe Cys Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu  
                                     85                    90                    95  
 Ile Ser Thr Leu Ala Lys Met Val Glu Cys Thr Gly Ser Ser Leu Gly  
                     100                    105                    110  
 Gly Gly Gly Val Leu Gly Val Gly Ile Val Gly Val Glu Asp Gly Glu  
                     115                    120                    125  
 Val Ser Leu Gly Leu Gly Pro Gln Cys Ser Gln Pro Val Leu Pro Cys  
                     130                    135                    140  
 Phe Val Thr Leu Ile Ser Gly Trp Pro Ala Leu Ser Leu Ser Pro Gly  
                     145                    150                    155                    160  
 Arg Arg Gly Glu Val Cys Gln Pro Gly  
                                     165

&lt;210&gt; 2752

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

Met Pro Thr Arg Gly Glu Glu Ala Val Leu Ser Arg Pro Leu Leu Pro  
                     1                    5                    10                    15

Arg Pro Pro Arg Arg Pro Gly Leu Gly Cys Gly Gly Pro Lys Ala Pro  
20 25 30  
Ala Leu Leu Val Ile Ser Arg Pro Glu Pro Arg Gln Ala Ser Ala Pro  
35 40 45  
Ser Arg Lys Pro Gly Arg Pro Gly Ala Thr Gly Lys Lys Ala Arg Ser  
50 55 60  
Arg Lys Pro Gly Cys Cys Gly Pro Thr Asn His Lys Ser Tyr Glu Arg  
65 70 75 80  
Gly Ser Arg Arg Arg Glu Lys Ser Gln Tyr Arg Leu Val Pro Ala Thr  
85 90 95  
Phe Gly Lys Lys Lys Phe Leu Thr Arg Arg Gly Ala Cys Phe Ala Leu  
100 105 110  
Gly Arg Val Ala Leu Ala Gly Ala Trp Val Thr Pro Ile Pro Pro Trp  
115 120 125  
Arg Leu Thr Ser Cys Arg Gly Gly Pro Pro Ala Ser Ser Trp Pro Arg  
130 135 140  
Ala Gln Gly Ala Ser Cys Pro Gly Thr Ala Asp Pro Gly Ile Ala Ser  
145 150 155 160  
Pro Gly Arg Ala Gly Gly Glu Gly Gly Arg Gly Gly Arg Gly Thr Ala  
165 170 175  
Gly Cys Ser Pro Pro Trp Gly Ile Arg Gly Ala Glu Pro Arg Trp Arg  
180 185 190  
Pro Arg Gly Pro Gly Ser Arg Glu Arg Thr Ala Glu Trp Pro Pro Glu  
195 200 205  
Leu Gly Leu Leu Leu Ser Pro Thr His Leu Pro Ser Asp Thr Val Ser  
210 215 220  
Thr Leu Gln Ala Ala Gly Arg Gly Gly Ala Pro Asn Gln Phe Ala Pro  
225 230 235 240  
Gly Leu Ser Ala Arg Leu Pro His Gly Asn Arg Thr Ala Thr Gly Thr

	245	250	255
Asp Gly Val Thr Tyr Leu Pro Met Gln Arg Gln Lys Leu Ala			
	260	265	270

&lt;210&gt; 2753

&lt;211&gt; 814

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

Met Ala Gly Val Gly Ala Ala Ala Leu Ser Leu Leu Leu His Leu Gly			
1	5	10	15
Ala Leu Ala Leu Ala Ala Gly Ala Glu Gly Gly Ala Val Pro Arg Glu			
	20	25	30
Pro Pro Gly Gln Gln Thr Thr Ala His Ser Ser Val Leu Ala Gly Asn			
	35	40	45
Ser Gln Glu Gln Trp His Pro Leu Arg Glu Trp Leu Gly Arg Leu Glu			
	50	55	60
Ala Ala Val Met Glu Leu Arg Glu Gln Asn Lys Asp Leu Gln Thr Arg			
	65	70	75
Val Arg Gln Leu Glu Ser Cys Glu Cys His Pro Ala Ser Pro Gln Cys			
	85	90	95
Trp Gly Leu Gly Arg Ala Trp Pro Glu Gly Ala Arg Trp Glu Pro Asp			
	100	105	110
Ala Cys Thr Ala Cys Val Cys Gln Asp Gly Ala Ala His Cys Gly Pro			
	115	120	125
Gln Ala His Leu Pro His Cys Arg Gly Cys Ser Gln Asn Gly Gln Thr			
	130	135	140

Tyr Gly Asn Gly Glu Thr Phe Ser Pro Asp Ala Cys Thr Thr Cys Arg  
145 150 155 160  
Cys Leu Glu Gly Thr Ile Thr Cys Asn Gln Lys Pro Cys Pro Arg Gly  
165 170 175  
Pro Cys Pro Glu Pro Gly Ala Cys Cys Pro His Cys Lys Pro Gly Cys  
180 185 190  
Asp Tyr Glu Gly Gln Leu Tyr Glu Glu Gly Val Thr Phe Leu Ser Ser  
195 200 205  
Ser Lys Pro Cys Leu Gln Cys Thr Cys Leu Arg Ser Arg Val Arg Cys  
210 215 220  
Met Ala Leu Lys Cys Pro Pro Ser Pro Cys Pro Glu Pro Val Leu Arg  
225 230 235 240  
Pro Gly His Cys Cys Pro Thr Cys Gln Gly Cys Thr Glu Gly Gly Ser  
245 250 255  
His Trp Glu His Gly Gln Glu Trp Thr Thr Pro Gly Asp Pro Cys Arg  
260 265 270  
Ile Cys Arg Cys Leu Glu Gly His Ile Gln Cys Arg Gln Arg Glu Cys  
275 280 285  
Ala Ser Leu Cys Pro Tyr Pro Ala Arg Pro Leu Pro Gly Thr Cys Cys  
290 295 300  
Pro Val Cys Asp Gly Cys Phe Leu Asn Gly Arg Glu His Arg Ser Gly  
305 310 315 320  
Glu Pro Val Gly Ser Gly Asp Pro Cys Ser His Cys Arg Cys Ala Asn  
325 330 335  
Gly Ser Val Gln Cys Glu Pro Leu Pro Cys Pro Pro Val Pro Cys Arg  
340 345 350  
His Pro Gly Lys Ile Pro Gly Gln Cys Cys Pro Val Cys Asp Gly Cys  
355 360 365  
Glu Tyr Gln Gly His Gln Tyr Gln Ser Gln Glu Thr Phe Arg Leu Gln

370	375	380
Glu Arg Gly Leu Cys Val	Arg Cys Ser Cys Gln Ala Gly Glu Val Ser	
385	390	395
Cys Glu Glu Gln Glu Cys Pro Val Thr Pro Cys Ala Leu Pro Ala Ser		400
405	410	415
Gly Arg Gln Leu Cys Pro Ala Cys Glu Leu Asp Gly Glu Glu Phe Ala		
420	425	430
Glu Gly Val Gln Trp Glu Pro Asp Gly Arg Pro Cys Thr Ala Cys Val		
435	440	445
Cys Gln Asp Gly Val Pro Glu Cys Gly Ala Val Leu Cys Pro Pro Ala		
450	455	460
Pro Cys Gln His Pro Thr Gln Pro Pro Gly Ala Cys Cys Pro Ser Cys		
465	470	475
Asp Ser Cys Thr Tyr His Ser Gln Val Tyr Ala Asn Gly Gln Asn Phe		
485	490	495
Thr Asp Ala Asp Ser Pro Cys His Ala Cys His Cys Gln Asp Gly Thr		
500	505	510
Val Thr Cys Ser Leu Val Asp Cys Pro Pro Thr Thr Cys Ala Arg Pro		
515	520	525
Gln Ser Gly Pro Gly Gln Cys Cys Pro Arg Cys Pro Asp Cys Ile Leu		
530	535	540
Glu Glu Glu Val Phe Val Asp Gly Glu Ser Phe Ser His Pro Arg Asp		
545	550	555
Pro Cys Gln Glu Cys Arg Cys Gln Glu Gly His Ala His Cys Gln Pro		
565	570	575
Arg Pro Cys Pro Arg Ala Pro Cys Ala His Pro Leu Pro Gly Thr Cys		
580	585	590
Cys Pro Asn Asp Cys Ser Gly Cys Ala Phe Gly Gly Lys Glu Tyr Pro		
595	600	605



Ser Gly Ala Asp Phe Pro His Pro Ser Asp Pro Cys Arg Leu Cys Arg  
 610 615 620  
 Cys Leu Ser Gly Asn Val Gln Cys Leu Ala Arg Arg Cys Val Pro Leu  
 625 630 635 640  
 Pro Cys Pro Glu Pro Val Leu Leu Pro Gly Glu Cys Cys Pro Gln Cys  
 645 650 655  
 Pro Ala Ala Pro Ala Pro Ala Gly Cys Pro Arg Pro Gly Ala Ala His  
 660 665 670  
 Ala Arg His Gln Glu Tyr Phe Ser Pro Pro Gly Val Pro Cys Arg Arg  
 675 680 685  
 Cys Leu Cys Leu Asp Gly Ser Val Ser Cys Gln Arg Leu Pro Cys Pro  
 690 695 700  
 Pro Ala Pro Cys Ala His Pro Arg Gln Gly Pro Cys Cys Pro Ser Cys  
 705 710 715 720  
 Asp Gly Cys Leu Tyr Gln Gly Lys Glu Phe Ala Ser Gly Glu Arg Phe  
 725 730 735  
 Pro Ser Pro Thr Ala Ala Cys His Leu Cys Leu Cys Trp Glu Gly Ser  
 740 745 750  
 Val Ser Cys Glu Pro Lys Ala Cys Ala Pro Ala Leu Cys Pro Phe Pro  
 755 760 765  
 Ala Arg Gly Asp Cys Cys Pro Asp Cys Asp Gly Glu Gly His Gly Ile  
 770 775 780  
 Gly Ser Cys Arg Gly Gly Met Arg Glu Thr Arg Gly Leu Gly Gln Asn  
 785 790 795 800  
 Asn Leu Tyr Cys Pro Arg Val Asp Leu Lys Tyr Leu Leu Gln  
 805 810

&lt;210&gt; 2754

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

Met Ala Val Gly Val Leu Thr Gln Thr Val Gly Pro Trp Pro Arg Pro

1 5 10 15

Val Ala Tyr Leu Ser Glu Gln Leu Asp Arg Val Ser Lys Gly Trp Pro

20 25 30

Pro Gly Leu Lys Ala Leu Ala Ala Thr Ala Leu Leu Ala Gln Glu Ala

35 40 45

Asp Lys Leu Thr Leu Arg Gln Asn Leu Asn Ile Lys Asp Pro His Ala

50 55 60

Val Val Thr Ser Val Thr Thr Lys Gly His His Trp Leu Thr Asn Ala

65 70 75 80

Arg Leu Thr Lys Tyr Gln Ser Leu Leu Cys Glu Asn Pro His Ile Thr

85 90 95

Ile Glu Val Cys Asn Thr Leu Asn Pro Ser Thr Leu Leu Leu Gly Ser

100 105 110

Glu Ser Pro Val Lys His Asn Cys Val Glu Val Leu Asp Ser Val Tyr

115 120 125

Phe Ser Arg Pro Asn Leu Arg Asp His Pro

130 135

&lt;210&gt; 2755

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

Met Pro Leu Val Leu Gly Gly Val Ala Ala Arg Pro Ala Cys Glu Thr  
 1 5 10 15  
 Ser Cys Leu Cys Phe Arg Pro Trp Arg Leu Ser Val Ser Ser Leu Ser  
 20 25 30  
 Pro Cys Ser Ala Leu Pro Leu Gly Lys Pro Leu Gln Pro Ile Leu Cys  
 35 40 45  
 Leu Arg Phe Cys His Leu Cys Leu Cys Leu Leu Pro Val Trp Arg Trp  
 50 55 60  
 Ser Ser Leu Gly Pro Pro Leu Met Ile Trp Thr Arg Val Ser Ile Leu  
 65 70 75 80  
 Lys Pro Pro Pro Lys Pro Leu Cys Leu Lys Pro Leu Pro Pro Thr Thr  
 85 90 95  
 Trp Gly Ser Thr Val Thr Asn Ser Ala Ala Asp Glu Ala Ser Leu Gly  
 100 105 110  
 Ala Leu Leu Ala Thr Gly Ser Trp Leu Ser Arg Arg Pro Gly Leu Ser  
 115 120 125  
 Leu Ser Gly Ser Gly Ala  
 130

&lt;210&gt; 2756

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

Met Cys Lys Ile Gly Gln Ile Leu Val Thr Phe Val Tyr Gln Asp Tyr

1                    5                    10                    15  
Ala Asp Phe Trp Pro Gly Val Val Asp Arg Ala Cys Asn Ser Ser Thr  
                  20                    25                    30  
Leu Gly Gly Arg Gly Gly Arg Ile Met Gly Ser Gly Asp Gly Asp His  
                  35                    40                    45  
Pro Gly Gln His Gly Glu Thr Pro Ser Leu Leu Asn Met Gln Lys Leu  
                  50                    55                    60  
Ala Gly Arg Gly Gly Ala Leu Leu Ser Ser Gln Leu Pro Gly Arg Leu  
65                    70                    75                    80  
Arg Gln Glu Asn Arg Leu Ser Leu Gly Gly Gly Gly Cys Ser Glu Val  
                  85                    90                    95  
Arg Ser Tyr His Cys Thr Pro Ala Trp Gln Gln Ser Glu Ala Leu Ser  
                  100                    105                    110  
Gln Lys Lys Lys Lys Lys Lys Lys Ile Met Leu Ile Ser Val Asn Cys  
                  115                    120                    125  
Leu Ser Pro Gly Gly Arg Gly Cys Ser Lys Leu Ser Ala Pro Leu Gln  
                  130                    135                    140  
Ser Ser Leu Ser Asp Arg Ala Gln Leu Cys Leu Lys Lys Lys Lys Asn  
145                    150                    155                    160  
Tyr Ala Ala Leu Phe Ser Leu Gly Ile Ile Pro Ser Phe Ser Ser Leu  
                  165                    170                    175  
Trp Arg Arg Arg Val  
                  180

&lt;210&gt; 2757

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2757

Met	Tyr	Val	His	Thr	Thr	Gly	Ile	Glu	Glu	Ala	Lys	Ile	Phe	Ser	Phe
1				5						10				15	
Val	Ile	Val	Ile	Phe	Lys	Glu	Trp	Thr	Ser	Gly	Leu	Phe	Phe	Met	Lys
			20					25					30		
Leu	His	Ser	Phe	Cys	Phe	Pro	Asn	Ile	Pro	Val	Gly	Asp	Glu	Glu	Ser
		35					40					45			
Leu	Phe	Phe	Phe	Ser	Ala	Arg	Ser	Ile	Tyr	Arg	Asn	Leu	Asn	Ser	Ile
	50					55					60				
Ala	Ile	Gln	Gly	Arg	Ala	Asn	Thr	Val	Ser	Phe	Leu	Asp	Pro	Glu	Gly
65				70					75					80	
Ile	Thr	Gly	Leu	Pro	Gln	Trp	Pro	Thr	Leu	Pro	Tyr	Leu	Pro	Lys	Glu
			85					90						95	
Asn	Ala	Gly	Gln	Leu	Tyr	Leu	Asn	Val	Leu	Gln	His	Val	Leu	Phe	Leu
		100					105						110		
Leu	Glu	Cys	Phe	Leu	Leu	Gly	Phe	Asp	Ala	Leu	Asn	Glu			
		115					120					125			

&lt;210&gt; 2758

&lt;211&gt; 656

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2758

Met	Ser	Glu	Leu	Ser	Asp	Glu	Ala	Ser	Glu	Pro	Glu	Leu	Leu	Asn	Arg
1				5						10				15	
Ser	Leu	Ser	Met	Trp	His	Gly	Leu	Gly	Thr	Gln	Val	Ser	Gly	Glu	Glu

20	25	30
Leu Asp Val Pro Leu Asp Leu His Thr Ala Ala Ser Ile Gly Gln Tyr		
35	40	45
Glu Val Val Lys Glu Cys Val Gln Arg Arg Glu Leu Asp Leu Asn Lys		
50	55	60
Lys Asn Gly Gly Gly Trp Thr Pro Leu Met Tyr Ala Ser Tyr Ile Gly		
65	70	75
His Asp Thr Ile Val His Leu Leu Leu Glu Ala Gly Val Ser Val Asn		
85	90	95
Val Pro Thr Pro Glu Gly Gln Thr Pro Leu Met Leu Ala Ser Ser Cys		
100	105	110
Gly Asn Glu Ser Ile Ala Tyr Phe Leu Leu Gln Gln Gly Ala Glu Leu		
115	120	125
Glu Met Lys Asp Ile Gln Gly Trp Thr Ala Leu Phe His Cys Thr Ser		
130	135	140
Ala Gly His Gln His Met Val Arg Phe Leu Leu Asp Ser Gly Ala Asn		
145	150	155
Ala Asn Val Arg Glu Pro Ile Cys Gly Phe Thr Pro Leu Met Glu Ala		
165	170	175
Ala Ala Ala Gly His Glu Ile Ile Val Gln Tyr Phe Leu Asn His Gly		
180	185	190
Val Lys Val Asp Ala Arg Asp His Ser Gly Ala Thr Ala Arg Met Leu		
195	200	205
Ala Lys Gln Tyr Gly His Met Lys Ile Val Ala Leu Met Asp Thr Tyr		
210	215	220
Ser Pro Ser Leu Pro Lys Ser Leu Tyr Arg Ser Pro Glu Lys Tyr Glu		
225	230	235
Asp Leu Ser Ser Ser Asp Glu Ser Cys Pro Ala Pro Gln Arg Gln Arg		
245	250	255

Pro Cys Arg Lys Lys Gly Val Ser Ile His Glu Gly Pro Arg Ala Leu  
260 265 270  
Ala Arg Ile Thr Gly Ile Gly Leu Gly Gly Arg Ala Pro Arg Pro Arg  
275 280 285  
Tyr Glu Gln Ala Pro Pro Arg Gly Tyr Val Thr Phe Asn Ser Ser Gly  
290 295 300  
Glu Asn Pro Leu Glu Glu Glu Gly Leu Cys Cys Arg Asp Val Thr Ser  
305 310 315 320  
Pro Ile Asn Glu Arg Asp Val Glu Ser Ser Ser Ser Ser Ser Ser Arg  
325 330 335  
Glu Glu His Ala Phe Cys Ala Asn Leu Gly Pro Val Gln Ser Ser Ser  
340 345 350  
Ser Ser Glu Gly Leu Ala Arg Ala Gln Gly Leu Ser Ser Glu Ala Ser  
355 360 365  
Val Glu Ser Asn Glu Asp Ser Asp His Ala Cys Lys Ser Ser Ala Arg  
370 375 380  
Lys Gln Ala Lys Ser Tyr Met Lys Thr Lys Asn Pro Asp Ser Gln Trp  
385 390 395 400  
Pro Pro Arg Ala Ala Thr Asp Arg Glu Gly Phe Leu Ala Glu Ser Ser  
405 410 415  
Pro Gln Thr Gln Arg Ala Pro Tyr Ser Gly Pro Gln Asp Leu Ala Ala  
420 425 430  
Leu Leu Glu Gln Ile Gly Cys Leu Lys Tyr Leu Gln Val Phe Glu Glu  
435 440 445  
Gln Asp Val Asp Leu Arg Ile Phe Leu Thr Leu Thr Glu Ser Asp Leu  
450 455 460  
Lys Glu Ile Gly Ile Thr Leu Phe Gly Pro Lys Arg Lys Met Thr Ser  
465 470 475 480  
Ala Ile Ala Arg Trp His Ser Ser Ala Arg Pro Pro Gly Asp Ala Leu

485	490	495	
Glu Leu Ala Tyr Ala Asp Arg Leu Glu Ala Glu Met Gln Glu Leu Ala			
500	505	510	
Ile Gln Leu His Lys Arg Cys Glu Glu Val Glu Ala Thr Arg Gly Gln			
515	520	525	
Val Cys Gln Glu Gln Glu Leu Arg Ala Val Val Glu Ser Cys Leu Leu			
530	535	540	
Glu Gln Asp Arg Ala Arg Glu Asp Leu Gln Ala Arg Leu Arg Glu Thr			
545	550	555	560
Trp Ala Leu Ala Arg Asp Ala Ala Leu Val Leu Asp Gln Leu Arg Ala			
565	570	575	
Cys Gln Ala Glu Leu Ser Ser Arg Val Arg Gln Asp Gln Pro Pro Gly			
580	585	590	
Ala Ala Thr Leu Gly Leu Ala Val Pro Pro Ala Asp Ser Lys Gly Trp			
595	600	605	
Gln Ala Ser Leu Gln Ala Met Ser Leu Pro Glu Leu Ser Gly Ala Leu			
610	615	620	
Glu Asp Arg Val Arg Glu Met Gly Gln Ala Leu Cys Leu Val Thr Gln			
625	630	635	640
Ser Leu Glu Lys Leu Gln Val Leu Asn Gly Lys Lys Trp Arg Glu Thr			
645	650	655	

&lt;210&gt; 2759

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2759



Met Ser Gly Lys Gly Gln Val Leu Pro Trp Asp Pro Arg Ala Arg Thr  
1 5 10 15  
Glu Leu Pro Glu Ala Pro Gly Ala Thr Arg Val Gly Pro Pro Ser Thr  
20 25 30  
Pro Ala Pro Arg Lys Val Arg His Pro Leu Pro Pro Ser Gln Ala Gly  
35 40 45  
Ile Leu Pro Ala Leu His Pro Leu Pro Cys Asp Val His Leu Pro Arg  
50 55 60  
Ser Arg Arg Trp Arg Cys Pro Thr Ser Ala Ala Ala Gly Gly Asp Arg  
65 70 75 80  
Arg Cys Ser Ser Ala Trp Arg Cys Gly Ala Met Ser Lys Gly Leu Glu  
85 90 95  
Asp Thr Glu Leu Ala Arg Val Arg Val Ala Arg Pro Ala Ala Thr Pro  
100 105 110  
Glu Ser Thr Leu Gln Arg Gly Ser Glu Pro Val Phe Arg Val Gln Gly  
115 120 125  
Arg Gly Gly Leu Ala Leu Ser Pro Ala Ser Gly Leu Cys Pro Arg Leu  
130 135 140  
Arg Pro Ala Leu Ser Pro Pro Pro Gln Pro Gln Val Arg Ala Arg Glu  
145 150 155 160  
Lys Gly Arg Gly Glu Arg Arg Ser Gly Ser Pro Asp  
165 170

&lt;210&gt; 2760

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2760

Met Pro Gly Pro Trp Leu Cys Pro Glu Phe Leu Leu Arg Lys Met Thr  
1 5 10 15  
Thr Leu Ser Cys Cys Leu Cys Ser Val Trp Phe Ser Asp Glu Asn Ser  
20 25 30  
Asn Gln Ser Ser Val Ser Asp Val Tyr Gln Leu Lys Val Asp Ser Ser  
35 40 45  
Thr Asn Ser Ser Pro Ser Pro Gln Gln Ser Glu Ser Leu Ser Pro Ala  
50 55 60  
His Thr Ser Asp Phe Arg Thr Asp Asp Ser Gln Pro Pro Thr Leu Gly  
65 70 75 80  
Gln Glu Ile Leu Glu Glu Pro Ser Leu Pro Ser Ser Glu Val Ala Asp  
85 90 95  
Glu Pro Pro Thr Leu Thr Lys Glu Glu Pro Val Pro Leu Glu Thr Gln  
100 105 110  
Val Val Glu Glu Glu Glu Asp Ser Gly Ala Pro Pro Leu Lys Arg Phe  
115 120 125  
Cys Val Asp Gln Pro Thr Val Pro Gln Thr Ala Ser Glu Ser  
130 135 140

&lt;210&gt; 2761

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2761

Met Asn Asp His Gln Glu Lys Leu Glu Gln Ala Asp Ala Gln Lys Gly  
1 5 10 15

Gly Glu Glu Gly His Val Pro Asp Asn Ser Cys Arg Gly Leu Gln Ala  
20 25 30  
Asp Gly Val Pro Glu Arg Thr Val Ile Gln Ile Ile Pro Ile Pro Lys  
35 40 45  
Asn Lys Glu Thr Arg Gly Gln Ala Ile Ser Lys Glu Ser Gln Thr Gly  
50 55 60  
Asn Pro Ser Arg Lys Leu Gly Ser Pro Leu Thr Gly Ser Trp Asp Trp  
65 70 75 80  
Ala His Glu Gly Asp Arg Tyr Cys Ser Ile Cys Asn Phe Leu Ser Ile  
85 90 95  
Arg Gly Ala Arg Cys  
100

&lt;210&gt; 2762

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2762

Met Cys Leu Val Ala Phe Pro Ser Arg Pro Pro Glu Glu Pro Thr Thr  
1 5 10 15  
Trp Thr Gly Tyr Phe Gly Lys Val Leu Met Ala Ser Thr Ser Tyr Leu  
20 25 30  
Pro Ser Gln Val Thr Glu Met Phe Asn Gln Gly Arg Ala Phe Ala Thr  
35 40 45  
Val Arg Leu Pro Phe Cys Gly His Lys Asn Ile Cys Ser Leu Ala Thr  
50 55 60  
Ile Gln Lys Ile Pro Arg Leu Leu Val Gly Ala Ala Asp Gly Tyr Leu

65                      70                      75                      80  
 Tyr Met Tyr Asn Leu Asp Pro Gln Glu Gly Gly Glu Cys Ala Leu Met  
                             85                      90                      95  
 Lys Gln His Arg Leu Asp Gly Ser Leu Glu Thr Thr Asn Glu Ile Leu  
                             100                      105                      110  
 Asp Ser Ala Ser His Asp Cys Pro Leu Val Thr Gln Thr Tyr Gly Ala  
                             115                      120                      125  
 Ala Ala Gly Lys Gly Thr Tyr Val Pro Ser Ser Pro Thr Arg Leu Ala  
                             130                      135                      140  
 Tyr Thr Asp Asp Leu Gly Ala Val Gly Gly Ala Cys Leu Glu Asp Glu  
 145                      150                      155                      160  
 Ala Ser Ala Leu Arg Leu Asp Glu Asp Ser Glu His Pro Pro Met Ile  
                             165                      170                      175  
 Leu Arg Thr Asp  
                             180

&lt;210&gt; 2763

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

Met Lys Gln Arg Phe Ser Ala Leu Gln Leu Leu Lys Leu Leu Leu Leu  
     1                      5                      10                      15  
 Leu Gln Pro Pro Leu Pro Arg Ala Leu Arg Glu Ala Leu Cys Pro Glu  
                             20                      25                      30  
 Pro Cys Asn Cys Val Pro Asp Gly Ala Leu Arg Cys Pro Gly Pro Thr  
                             35                      40                      45

Ala Gly Leu Thr Arg Leu Ser Leu Ala Tyr Leu Pro Val Lys Val Ile  
50 55 60  
Pro Ser Gln Ala Phe Arg Gly Leu Asn Glu Val Ile Lys Ile Leu Ile  
65 70 75 80  
Gln Asn Thr Lys Asn Leu Arg Tyr Ile Glu Pro Gly Ala Phe Ile Asn  
85 90 95  
Leu Pro Arg Leu Lys Tyr Leu Ser Ile Cys Asn Thr Gly Ile Arg Lys  
100 105 110  
Phe Pro Asp Val Thr Lys Val Phe Ser Ser Glu Ser Asn Phe Ile Leu  
115 120 125  
Glu Ile Cys Asp Asn Leu His Ile Thr Thr Ile Pro Gly Asn Ala Phe  
130 135 140  
Gln Gly Met Asn Asn Glu Ser Val Thr Leu Lys Leu Tyr Gly Asn Gly  
145 150 155 160  
Phe Glu Glu Val Gln Ser His Ala Phe Asn Gly Thr Thr Leu Thr Ser  
165 170 175  
Leu Glu Leu Lys Glu Asn Val His Leu Glu Lys Met His Asn Gly Ala  
180 185 190  
Phe Arg Gly Ala Thr Gly Pro Lys Thr Leu Pro Cys Arg Ala Met Ala  
195 200 205

&lt;210&gt; 2764

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2764

Met Thr Leu Cys His Arg Asp Ser Phe Gly Ser Trp His Leu Phe His

1 5 10 15  
Leu Leu Leu Leu Glu Tyr Met Ile His Ile Leu Gln Ser Cys Leu Glu  
20 25 30  
Glu Glu Glu Glu Glu Glu Asp Met Gly Thr Val Lys Glu Met Leu Pro  
35 40 45  
Asp Asp Pro Thr Leu Gly Gln Pro Asp Gln Ala Leu Phe His Ser Leu  
50 55 60  
Asn Ser Ser Leu Ser Gln Ala Cys Ala Ser Pro Ser Met Glu Pro Leu  
65 70 75 80  
Gly Val Met Pro Thr His Met Gly Gln Gly Arg Tyr Pro Val Gly Val  
85 90 95  
Ser Asn Met Val Leu Arg Ile Leu Gly Phe Leu Val Asp Thr Ala Met  
100 105 110  
Gly Asn Lys Leu Ile Gln Val Leu Leu Glu Asp Glu Thr Thr Glu Ser  
115 120 125  
Ala Val Lys Leu Ser Leu Pro Met Gly Gln Glu Ala Leu Ile Thr Leu  
130 135 140  
Lys Asp Gly Gln Gln Phe Val Ile Gln Ile Ser Asp Val Pro Gln Asn  
145 150 155 160  
Ser Glu Asp Ile Tyr Phe Arg Glu Asn Asn Ala Asn Val  
165 170

&lt;210&gt; 2765

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2765

Met His Leu Ser Ile His Pro Ser Leu Pro Leu Cys Met His Leu Ser  
 1 5 10 15  
 Ile His Pro Arg Leu Cys Ala Cys Ile Cys Pro Ser Ile Pro Ala Ser  
 20 25 30  
 Val His Ala Ser Val Arg Pro Ser Ile Pro Ala Ser Val His Ala Ser  
 35 40 45  
 Val His Ser Ser Leu Pro Leu Cys Met His Leu Ser Ile His Pro Ser  
 50 55 60  
 Pro Pro Leu Cys Met His Leu Ser Ile His Pro Cys Leu Cys Ala Cys  
 65 70 75 80  
 Ile Cys Pro Phe Ile Pro Ala Ser Val His Ala Ser Val His Pro Ser  
 85 90 95  
 Ile Pro Ala Ser Val His Ala Ser Val His Ser Ser Leu Pro Leu Cys  
 100 105 110  
 Met His Leu Ser Ile His Pro Ser Pro Pro Leu Cys Met His Leu Ser  
 115 120 125  
 Ile His Pro Cys Leu Cys Val Cys Ile Cys Pro Ser Ile His Pro Arg  
 130 135 140  
 Leu Cys Ala Cys Ile Arg Pro Ser Ile Pro Ala Ser Val His Ala Ser  
 145 150 155 160  
 Val Arg Pro Ser Ile Pro Ala Ser Val His Ala Ser Val Arg Pro Phe  
 165 170 175  
 Ile Pro Ala Ser Val His Ala Ser Val His Ser Ser Ile Pro Asp Ser  
 180 185 190  
 Val His Ala Ser Val His Pro Ser Ile Leu Ala Ser Met Leu Ala Phe  
 195 200 205  
 Val Arg Pro Ser Ile Pro Ala Ser Val His Ala Ser Ile Pro Ala Ser  
 210 215 220  
 Val His Ala Ser Val Ser Leu Ser Ile Pro Asp Pro Phe Phe Val Met

225                      230                      235                      240  
 Val Leu Ser Ala His Asn Ser Leu Ile Leu Arg Arg Ser Leu Asp Pro  
                          245                      250                      255  
 Phe Pro Pro Leu Thr Pro Cys Cys Ser Leu Pro Ser Leu Pro Gly Gln  
                          260                      265                      270  
 Val Leu Gln Pro Val Val Ser Thr Gln Ser Ser Leu Pro Pro Leu Leu  
                          275                      280                      285  
 Ser His Leu Ser Pro Leu His Ser Lys Phe Phe Pro Asn Ala Leu Gly  
                          290                      295                      300  
 Leu Gln Ala Leu Lys Arg Ser Leu Cys Pro Trp Met Thr Lys His Arg  
 305                      310                      315                      320  
 Pro Met

<210> 2766

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2766

Met Ser Ser Leu Lys Val Pro His Thr Arg Pro Val Ser Leu Ser Thr  
     1                      5                      10                      15  
 Gly Ser Cys Val Ile Ile Thr Gly Thr Pro Ile Ile Pro Phe Val Met  
                          20                      25                      30  
 Asp Pro Gln Leu Gln Val Asp Phe His Thr Glu Met Lys Glu Asp Ser  
                          35                      40                      45  
 Asp Ile Ala Phe His Phe Arg Val Tyr Phe Gly His Trp Val Val Met  
                          50                      55                      60



Asn Ser Arg Val Asn Gly Ala Trp Gln Tyr Glu Val Thr Cys His Asn  
65 70 75 80  
Met Pro Phe Gln Asp Gly Lys Pro Phe Asn Leu Cys Ile Ser Val Leu  
85 90 95  
Ala Asp Glu Tyr Gln Pro Phe Arg Ile Ile Ser Tyr Val Leu Gln His  
100 105 110  
Leu Phe Cys Ser Ser Ser Leu Lys Thr Phe Glu Phe Pro Ser Leu Pro  
115 120 125  
Pro Pro Leu His Leu Trp Ala Thr Pro Lys Arg Asn Trp Ala Ile Ser  
130 135 140  
Ser His Ser Glu Trp Glu Leu  
145 150

&lt;210&gt; 2767

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

Met Glu Val Arg Val Pro Leu Glu Glu Ala Gly Cys Ser Gln Ser Ser  
1 5 10 15  
Asn Thr Met Leu Gly Glu Pro Leu Leu Arg Ala Val Arg Gln Gly Cys  
20 25 30  
Leu Ser Leu Gln Lys Phe Leu Leu Pro Phe Val Gln Leu Cys Pro Ala  
35 40 45  
Pro Arg Gly Arg Val Tyr Arg Gly Ser Ser Pro Cys Arg Ala Val Val  
50 55 60  
Gly Ser Ala Gln Phe Glu Leu His Arg His Phe Val Tyr Leu Leu Lys

65                      70                      75                      80  
 Pro Gln Gln Trp Gln Thr Pro Leu Pro Leu Pro Gly Cys Cys Leu Thr  
                             85                      90                      95  
 Gly Gln Ser Gln Thr Ala Glu Pro Ala Val Ser Lys Ala Pro Trp Ala  
                             100                      105                      110  
 Trp Asp Leu Leu Ser Gln Ala Gln Asp Ile Ile Ser Trp Cys Ala Ile  
                             115                      120                      125  
 Cys

<210> 2768

<211> 119

<212> PRT

<213> Homo sapiens

<400> 2768

Met Arg Lys Gly Ser Met Gly Asn Asn Leu Asp Ala Glu Ala Leu Cys  
     1                      5                      10                      15  
 Trp Glu Gly Leu Asp His Val Asn Met Arg Cys Ile Cys Ser Val Gly  
                             20                      25                      30  
 Glu Lys His Val Val Ala Ser Gly Trp Gln Glu Gly Arg Arg His Leu  
                             35                      40                      45  
 Phe Ser Glu Leu Leu Pro Ser Glu Ser Ser Val Leu Leu Thr Met Gly  
                             50                      55                      60  
 Gly Cys Leu Glu Pro Gln Gly Ser Ala Trp Cys Ser Ser Leu Cys Ala  
     65                      70                      75                      80  
 Glu Gln Ser Leu Pro Ser Pro Arg His Leu Glu Ser Leu Ser Ser Arg  
                             85                      90                      95

Gly Pro His Ile Val Phe Leu Phe Thr Met Phe Leu Ile Leu Ser Val

100

105

110

Glu Ser Ser Leu Lys Thr His

115

<210> 2769

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2769

Met Thr Gln Val Leu Met Val Gln Arg Gly Gln Pro Val Arg Gly Gln

1

5

10

15

Arg Gln Ala Arg Thr Glu Met Val Ser Trp Lys Thr Ala Arg Leu His

20

25

30

Leu Ser Asn Gly Thr Arg Leu Glu Gly Arg Pro Ala Ala Leu Gly Asn

35

40

45

Arg Gly Cys Phe Trp Val Asn Ser Gln Thr Arg Trp Cys Arg Glu Pro

50

55

60

Trp Thr Trp Gln Leu Gly Trp Thr Ser His Gly Ser Val Phe Gln Glu

65

70

75

80

Thr Ala Ser Gln Cys Leu Ser Gly Gln Phe Ser Lys Arg Thr Ile His

85

90

95

Gly Pro Phe Phe His Ser Leu Pro Met His Arg Leu Gly Trp Ala

100

105

110

<210> 2770

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2770

Met Asp Arg Pro Leu His Pro Ala Pro Ala Pro Cys Thr Leu Arg Pro

1 5 10 15

Arg Ser Gln Ala Gln Gln Arg Pro Glu His Gly Gly Cys Pro Gln Ser

20 25 30

Thr Ser Ala Phe Leu Arg Thr Ala Cys Glu Gln Gly Gly Gly Ala Phe

35 40 45

Arg Lys Trp Lys Pro Thr Leu Arg Val Arg Ala Val His Pro Pro Arg

50 55 60

Ala Ser Ser Leu Ser Leu Phe Arg Ser Thr Arg Ala Gln Ser Val Thr

65 70 75 80

Asn Asp Thr Gln His Leu Val Pro Arg Glu Ile Gly Gly Glu Glu Gly

85 90 95

Gly Val Leu Lys Arg Ser Ala Ser Pro Trp Glu Val Asn Ile Leu Ser

100 105 110

Glu Pro Leu Ala Tyr Arg Gly Gly Tyr Thr His Trp Met Gly Gly His

115 120 125

Leu Gly Ser Tyr Trp His Val Ser Gln Phe Ala Ser Pro Pro

130 135 140

&lt;210&gt; 2771

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2771

Met	Ser	Leu	Gly	Pro	Cys	Ser	Ala	Ser	Cys	Gly	Leu	Gly	Thr	Ala	Arg
1				5					10					15	
Arg	Ser	Val	Ala	Cys	Val	Gln	Leu	Asp	Gln	Gly	Gln	Asp	Val	Glu	Val
			20					25					30		
Asp	Glu	Ala	Ala	Cys	Ala	Ala	Leu	Val	Arg	Pro	Glu	Ala	Ser	Val	Pro
		35					40					45			
Cys	Leu	Ile	Ala	Asp	Cys	Thr	Tyr	Arg	Trp	His	Val	Gly	Thr	Trp	Met
	50					55					60				
Glu	Cys	Ser	Val	Ser	Cys	Gly	Asp	Gly	Ile	Gln	Arg	Arg	Arg	Asp	Thr
65				70					75					80	
Cys	Leu	Gly	Pro	Gln	Ala	Gln	Ala	Pro	Val	Pro	Ala	Asp	Phe	Cys	Gln
				85				90					95		
His	Leu	Pro	Lys	Pro	Val	Thr	Val	Arg	Gly	Cys	Trp	Ala	Gly	Pro	Cys
		100						105					110		
Val	Gly	Gln	Gly	Thr	Pro	Ser	Leu	Val	Pro	His	Glu	Glu	Ala	Ala	Ala
		115					120					125			
Pro	Gly	Arg	Thr	Thr	Ala	Thr	Pro	Ala	Gly	Ala	Ser	Leu	Glu	Trp	Ser
	130					135					140				
Gln	Ala	Arg	Gly	Leu	Leu	Phe	Ser	Pro	Ala	Pro	Gln	Pro	Arg	Arg	Leu
145				150					155				160		
Leu	Pro	Gly	Pro	Gln	Glu	Asn	Ser	Val	Gln	Ser	Ser	Ala	Cys	Gly	Arg
			165					170				175			
Gln	His	Leu	Glu	Pro	Thr	Gly	Thr	Ile	Asp	Met	Arg	Gly	Pro	Gly	Gln
		180						185				190			
Ala	Asp	Cys	Ala	Val	Ala	Ile	Gly	Arg	Pro	Leu	Gly	Glu	Val	Val	Thr
		195					200					205			
Leu	Arg	Val	Leu	Glu	Ser	Ser	Leu	Asn	Cys	Ser	Ala	Gly	Asp	Met	Leu

210	215	220
Leu Leu Trp Gly Arg Leu Thr Trp Arg Lys Met Cys Arg Lys Leu Leu		
225	230	235
Asp Met Thr Phe Ser Ser Lys Thr Asn Thr Leu Val Val Arg Gln Arg		240
245	250	255
Cys Gly Arg Pro Gly Gly Gly Val Leu Leu Arg Tyr Gly Ser Gln Leu		
260	265	270
Ala Pro Glu Thr Phe Tyr Arg Glu Cys Asp Met Gln Leu Phe Gly Pro		
275	280	285
Trp Gly Glu Ile Val Ser Pro Ser Leu Ser Pro Ala Thr Ser Asn Ala		
290	295	300
Gly Gly Cys Arg Leu Phe Ile Asn Val Ala Pro His Ala Arg Ile Ala		
305	310	315
Ile His Ala Leu Ala Thr Asn Met Gly Ala Gly Thr Glu Gly Ala Asn		
325	330	335
Ala Ser Tyr Ile Leu Ile Arg Asp Thr His Ser Leu Arg Thr Thr Ala		
340	345	350
Phe His Gly Gln Gln Val Leu Tyr Trp Glu Ser Glu Ser Ser Gln Ala		
355	360	365
Glu Met Glu Phe Ser Glu Gly Phe Leu Lys Ala Gln Ala Ser Leu Arg		
370	375	380
Gly Gln Tyr Trp Thr Leu Gln Ser Trp Val Pro Glu Met Gln Asp Pro		
385	390	395
Gln Ser Trp Lys Gly Lys Glu Gly Thr		400
405		

&lt;210&gt; 2772

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2772

Met Lys Trp Ile Pro Thr Ser Asn Pro Leu Pro Gln Pro Phe Lys Glu  
1 5 10 15  
Pro Leu Ala Ile Met Arg Val Glu Asn Ser Lys Ala Glu Lys Pro Lys  
20 25 30  
Pro Ala Arg Arg Lys Thr Ala Thr Asp Thr Leu Ile Ala Pro Leu Leu  
35 40 45  
Asp Arg Ser Ala His His Tyr Lys Gly Gly Gly Gly Asp Pro Gly Pro  
50 55 60  
Gly Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Pro Asp Lys Lys His  
65 70 75 80  
Ala Arg His Phe Ser Leu Asp Val His Pro Tyr Ile Leu Gly Thr Lys  
85 90 95  
Lys Ala Lys Ala Glu Ala Val Pro Ala Ala Leu Pro Ala Ser Arg Ser  
100 105 110  
Gln Glu Gly Gly Phe Leu Ser Gln Ala Glu Asp Cys Gly Leu Gly Leu  
115 120 125  
Ala Pro Ala Pro Ile Lys Asp Ala Pro Leu Pro Glu Lys Glu Ile Pro  
130 135 140  
Tyr Pro Thr Glu Pro Ala Arg Ala Gly Leu Pro Ser Gly Gly Pro Phe  
145 150 155 160  
His Val Arg Ser Pro Pro Ala Ala Pro Ala Val Ala Pro Leu Thr Pro  
165 170 175  
Ala Ser Leu Gly Lys Ala Glu Pro Leu Thr Ile Leu Ser Gln Thr Pro  
180 185 190  
His Thr Arg Cys Cys Thr Ser Thr Arg Cys Thr Arg Pro Gly Arg Arg

195                      200                      205  
 Arg Thr Gly Ala Pro Ala Cys Arg Arg Thr Trp Gly Thr Ser Ser Pro  
 210                      215                      220  
 Ser Leu Pro His Ser Arg Ser Ser Ser Pro Pro Ser Thr Ser Arg Glu  
 225                      230                      235                      240  
 Arg Ser

<210> 2773

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2773

Met Phe Ser Val Val Cys His Phe Val Ser Ser Leu Arg Gly Tyr Phe  
 1                      5                      10                      15  
 Pro Ala Ser Leu Lys Ser Ser Phe Pro Ala Cys Cys Phe Trp Thr Leu  
 20                      25                      30  
 Phe Ser Thr Val Val Thr Ser Cys Arg Leu Cys Gly Pro Ile Leu His  
 35                      40                      45  
 Gln Asn Val Thr Ser Ile Asn Ser Ala Ala Met Arg Gln Ile His Gln  
 50                      55                      60  
 Trp Pro Ala Asp Ser Arg Gln Gln Ala Pro Met Ser Asp Gly His Leu  
 65                      70                      75                      80  
 His Ala Ser Arg Gly Pro Pro Pro Pro Cys Gly Val Ser Arg Ala Gly  
 85                      90                      95  
 Leu Thr Ile Pro Leu Gly Thr Arg Ala Ser Gly Trp Pro Glu Ser Ser  
 100                      105                      110



His Thr Leu Cys

115

&lt;210&gt; 2774

&lt;211&gt; 295

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2774

Met Thr Ser Gly Asp Pro Pro Ser Leu Ala Ser Gln Ser Ala Arg Ile

1 5 10 15

Thr Asp Ala Ser His His Ala Arg Pro Leu Phe Leu Phe Leu Arg Gln

20 25 30

Gly Leu Ser Ser Phe Ala Glu Ala Gly Val Gln Trp His Asn Tyr Gly

35 40 45

Ser Leu Gln Pro Gln Pro Pro Gly Val Lys Arg Ala Ser His Leu Asn

50 55 60

Leu Pro Ser Ser Met His His Thr Trp Leu Ile Phe Val Phe Phe Val

65 70 75 80

Gly Thr Glu Phe Gln Cys Val Ala Gln Ala Gly Val Gly Leu Pro Gly

85 90 95

Ser Ser Asn Pro Pro Thr Ser Ala Ser Gln Arg Ala Gly Thr Thr Gly

100 105 110

Met Ser His Ser Thr Gln His Phe Phe Asn Ser Val Thr Pro Gln Leu

115 120 125

Leu Leu Leu Pro Leu Pro Gly Lys Pro Ala Arg Leu Thr Cys His Pro

130 135 140

Arg Leu Ser Thr Gln Thr Leu Leu Ala Met Arg Gly Leu Gly Gln Gln

145                      150                      155                      160  
 Ser Arg Ala Pro Phe Pro Gly Pro Pro Gln Leu Pro Leu Gly Gln Arg  
                                  165                      170                      175  
 Val Trp Gly Leu Ile Phe Asn Pro Leu Pro Ala Pro Glu Ala Leu Glu  
                                  180                      185                      190  
 Lys Ser Arg Thr Gln Asp Ser Ser Asp Ser Ala Pro Leu Pro Ala Arg  
                                  195                      200                      205  
 Arg Phe Leu Leu Thr Arg Pro Ala Gln Pro Asp Leu Gly Gly Ser Pro  
                                  210                      215                      220  
 Ala Pro Ser Ser Leu Pro Ser Trp Leu Arg Val Ala Thr Arg Ser Ile  
 225                      230                      235                      240  
 Trp Cys Phe Arg Tyr Ser Leu Gly Ser Arg Thr Leu Val Gly Leu Ser  
                                  245                      250                      255  
 His Thr Arg Gly Gly Cys Arg Val Ser Gln Leu Arg Leu Ala Ser Thr  
                                  260                      265                      270  
 Trp Asp Thr Phe His Ser Lys Trp Val Gly Thr Arg Thr Thr Lys Leu  
                                  275                      280                      285  
 Met Leu Phe Leu Lys Gly Lys  
                                  290                      295

&lt;210&gt; 2775

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2775

Met Thr Val Pro His Pro Val Leu Ser Gly His Gly Glu Gly Thr Leu  
                                  1                      5                      10                      15

Gly Lys Asp Thr Arg Asp Arg Glu Gly Ala Ala Gly Leu Phe Ala Gly  
                     20                    25                    30  
 Ser Gly Arg Glu Ala Phe Leu Leu His Val Ala Ala Gly Thr Gln Thr  
                     35                    40                    45  
 Ala Ala Leu Gln Gly Pro Leu Ala Gly Phe Gly Ser Leu Arg Pro Arg  
                     50                    55                    60  
 Thr Arg Leu His Thr Ala Val Ala Ser Leu Ser Arg Val Gly Cys Ser  
                     65                    70                    75                    80  
 Thr Glu Gly Ala Asn Thr Ser Arg Gly Leu Cys Gln Val Ile Thr Lys  
                                     85                    90                    95  
 Gln Ile Pro Gly Asp Phe Leu Ser Ser Pro Arg Pro Pro Gly Gln Cys  
                     100                    105                    110  
 Pro Leu Arg Val Pro  
                     115

<210> 2776

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2776

Met Arg Gly Ser Ala Trp Gly Leu Glu Glu Val Ser Leu Arg Lys Leu  
                     1                    5                    10                    15  
 His Leu Ser Thr Arg Leu Arg Ala Leu Asp Met Glu Gly Val Val Arg  
                     20                    25                    30  
 Ala Lys Val His Val Glu Glu Thr Ser Ala Gly Glu Gly Arg Gly Arg  
                     35                    40                    45  
 Gly Ser Gln Asn Lys Glu Ala Val Tyr Ser Glu Ala Phe Gln Arg Ala

<210> 2777

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2777

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Arg Leu Pro Gly Asp Ser Thr Arg Gln Val Val Val Arg Ser Gly Val  
50 55 60  
Val Leu Gly Arg Gly Gly Gly Ala Met Gly His Met Leu Leu Pro Phe  
65 70 75 80  
Arg Leu Gly Leu Gly Val Pro Ile Gly Ser Gly His Gln Phe Phe Pro  
85 90 95  
Trp Ile His Ile Gly Asp Leu Ala Gly Ile Leu Thr His Ala Leu Glu  
100 105 110  
Ala Asn His Val His Gly Val Leu Asn Gly Val Ala Pro Ser Ser Ala  
115 120 125  
Thr Asn Ala Glu Phe Ala Gln Thr Leu Gly Ala Ala Leu Gly Arg Arg  
130 135 140  
Ala Phe Ile Pro Leu Pro Ser Ala Val Val Gln Ala Val Phe Gly Arg  
145 150 155 160  
Gln Arg Ala Ile Met Leu Leu Glu Gly Gln Lys Val Ile Pro Gln Arg  
165 170 175  
Thr Leu Ala Thr Gly Tyr Gln Tyr Ser Phe Pro Glu Leu Gly Ala Ala  
180 185 190  
Leu Lys Glu Ile Val Ala  
195

&lt;210&gt; 2778

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

Met Tyr Arg Ala Lys Glu Arg Gln Phe Asp Val Pro Arg His Leu Gly

1                      5                      10                      15  
 Trp Cys Trp Glu Glu Ser Gly Trp His Met Gly Gly Arg Asn Glu Glu  
                     20                      25                      30  
 Arg Trp Asp Gly Lys Asp Arg Glu Asp Thr Gln Gly Ala Leu Arg Val  
                     35                      40                      45  
 Gly Arg Gly Ala Thr Phe Thr Trp Gly Arg Glu Gly Gly Phe Cys Glu  
                     50                      55                      60  
 Trp Ser Gln Val Lys Gly Gly Cys Phe Met Val Gln Gly Ser Gln Gly  
                     65                      70                      75                      80  
 Phe Ser Gly Gly Gly Met Cys Val Cys Arg Arg Ile Gly Asp Glu Asp  
                     85                      90                      95  
 Gly Pro Lys Thr Leu Leu Arg His  
                     100

&lt;210&gt; 2779

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2779

Met Ser Ser Pro Thr Ala Ser Ser Thr Thr Pro Arg Cys Gly Thr Ser  
 1                      5                      10                      15  
 Ala Gly Pro Ala Ser Pro Thr Trp Arg Cys Arg Ala Thr Ala Leu Arg  
                     20                      25                      30  
 Leu His His Pro Val Asp Gln Leu Pro His Gln Val Leu Gln Pro Thr  
                     35                      40                      45  
 Thr Gly Gln Arg Gln Pro Gly Thr Gly Leu Pro Trp His Ser Thr Pro  
                     50                      55                      60

<210> 2780

<211> 218

<212> PRT

<213> Homo sapiens

&lt;400&gt; 2780

Met Gly Ala Leu Asp Gly Ser Leu Val Leu Ala Gln Gly Val Asn Asp

1 5 10 15

Asp Thr Asp Ser Met Pro His Pro Leu Ser Cys Pro Ala Ser Leu Thr

20 25 30

Lys Thr Glu Trp Pro Phe His Phe Tyr Ser Pro Arg Val Ser Glu Asp

35 40 45

Val Gly Cys Gly Arg Gly Arg Arg Gly Arg Arg Lys Thr Arg Asn Gly

50 55 60

Gly Arg Glu Leu Cys Ala Arg Asp Thr Gly Ser Glu Thr Gln Gln His

65 70 75 80

Ser Ser Lys Arg Pro Pro Ala Pro Arg Pro Val Thr Pro Thr Ala Gly

85 90 95

Ala Ile His Lys Thr Thr Gly His Pro Arg Cys Thr Arg Leu Ser Gln

100 105 110

Glu Pro Phe Cys Gln Arg Pro Gln Ala Gly Cys Pro Pro His Trp Ala

115 120 125

Ala Arg Val Gly Gly Ala Ala Val Ala Leu Val Pro Ser Gly Cys Leu

130 135 140

Ser Asn Arg Cys Gln Pro Thr Asn Cys Ser Pro Ala Gly Pro Arg Asp

145 150 155 160

Gln Pro Asp Thr Leu Pro Thr Glu Asp Glu Val Leu His Cys Glu Gly

165 170 175

Pro His Cys Pro Ala Val Pro Asp Thr Ala Pro Leu Ser Met Arg Glu

180 185 190

Ala Pro His Leu Ala Pro Arg Ser Pro Ala His Thr Ser Gln Gln Pro

195 200 205

Gly Pro Gly Trp Leu Pro Ser Ser Lys Pro

210 215



&lt;210&gt; 2781

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2781

Met Asn Cys Gly Leu Thr Val Cys Ser Arg Pro Leu Ser Ala Phe His  
1 5 10 15  
Ser Val Thr Ala Ile Phe Pro Cys Lys Ile Gly Gly Gly Glu Arg Val  
20 25 30  
Gly Leu Leu Gly Glu Val Leu Asp Leu Ser Ala Ile Cys Phe Val Pro  
35 40 45  
Trp Val Ser Pro Glu Ile Arg Ala Phe Gly Trp Val Cys Ser Leu Lys  
50 55 60  
Val Glu Asn Gly Phe Cys Leu Arg Gly Cys Val Ser Ile Thr Ser Ser  
65 70 75 80  
Met Val Cys Cys Tyr Ser Thr Ser Arg Leu Pro Phe Glu His Pro Phe  
85 90 95  
Arg Lys Glu Arg Lys Val Asn Lys Leu His Phe Thr His Cys Val Ser  
100 105 110  
Gly Thr Ser Cys Thr  
115

&lt;210&gt; 2782

&lt;211&gt; 137

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2782

Met Ser Leu Trp Val Pro Ser Gly Leu His Glu Asn Leu Thr Asp Ala  
1 5 10 15  
Thr Thr Glu Gly Thr Gly Phe Arg Arg Ser Trp Gln Tyr Val Ser Ser  
20 25 30  
Ala Glu Gly Thr Gly Phe Arg Arg Ser Trp Gln Tyr Val Ser Ser Ala  
35 40 45  
Asn Leu Arg Gly Glu Thr Asn Ala His Ser Pro Glu Glu Met Arg Thr  
50 55 60  
His Phe Cys Met Pro Pro Ser Pro Thr Pro Leu Pro Leu Ala Gln Pro  
65 70 75 80  
Tyr Val Leu Phe Phe Ala Phe Asp Phe Pro Arg Leu His Leu Phe Leu  
85 90 95  
Leu Phe Phe Phe Phe Ser Pro Thr Glu Ser Arg Phe Val Ala Gln Thr  
100 105 110  
Val Val Gln Trp Cys Asp His Gly Ser Leu Gln Ser Pro Pro Pro Gly  
115 120 125  
Leu Asn Asp Thr Pro Ala Ser Ala Ser  
130 135

<210> 2783

<211> 480

<212> PRT

<213> Homo sapiens

<400> 2783

Met Asp Pro His Thr Glu Glu Leu Pro Gln Tyr Ile His Ile Asn Gln  
 1 5 10 15  
 Asn Glu Phe Cys Ile Arg Arg His Lys Lys Gln Lys Glu Glu Asp Ile  
 20 25 30  
 Ala Ile Cys Glu Cys Lys Tyr Asp Ala Asp Asp Pro Asp Asn Ala Cys  
 35 40 45  
 Gly Asp Ser Cys Leu Asn Val Leu Thr Ser Thr Glu Cys Thr Pro Gly  
 50 55 60  
 Tyr Cys His Cys Asp Ile Leu Cys Lys Asn Gln Lys Phe Gln Lys Cys  
 65 70 75 80  
 Glu Tyr Ala Lys Thr Lys Leu Phe Lys Thr Glu Gly Arg Gly Trp Gly  
 85 90 95  
 Leu Leu Ala Asp Glu Asp Ile Lys Ala Gly Gln Phe Val Ile Glu Tyr  
 100 105 110  
 Cys Gly Glu Val Ile Ser Trp Lys Glu Ala Lys Arg Arg Ser Gln Ala  
 115 120 125  
 Tyr Glu Asn Gln Gly Leu Lys Asp Ala Phe Ile Ile Phe Leu Asn Val  
 130 135 140  
 Ser Glu Ser Ile Asp Ala Thr Arg Lys Gly Ser Leu Ala Arg Phe Ile  
 145 150 155 160  
 Asn His Ser Cys Gln Pro Asn Cys Glu Thr Arg Lys Trp Asn Val Leu  
 165 170 175  
 Gly Glu Ile Arg Val Gly Ile Phe Ala Lys His Asp Ile Pro Ile Gly  
 180 185 190  
 Thr Glu Leu Ala Tyr Asp Tyr Asn Phe Glu Trp Phe Gly Gly Ala Lys  
 195 200 205  
 Val Arg Cys Leu Cys Gly Ala Leu Lys Cys Ser Gly Phe Leu Gly Ala  
 210 215 220  
 Lys Ser Arg Gly Phe Gln Glu Asp Thr Tyr Leu Trp Glu Asp Asp Asp

225                      230                      235                      240  
Gly Arg Tyr Ser Val Glu Lys Ile Pro Val Tyr Asp Ser Ala Glu Asp  
                         245                      250                      255  
Glu Pro Val Ser Asn Phe Asn Gly Arg Thr Glu Pro Ser Leu Asp Val  
                         260                      265                      270  
Ile Val Lys Ala Glu Gln Leu Ser Glu Ser Thr Ala Phe His Val Gln  
                         275                      280                      285  
Pro Leu Asp Ser Val Gln Met Lys Asp Leu Asp Val Lys Lys Ile Lys  
                         290                      295                      300  
Thr Asp Val Ala Asp Glu Asp Met Asn Phe Tyr Ser Gln Asp Ser Glu  
305                      310                      315                      320  
His Thr Leu Ser Gln Lys Asn Ala Ile Ser His Ile Arg Ser Asn Thr  
                         325                      330                      335  
Ala Gly Arg Asn Tyr Cys Leu Gly Pro Arg Ser Met Ser Thr Lys Arg  
                         340                      345                      350  
Ser Arg Ala Tyr Asn Gly Gly Arg Phe Lys Asn Leu Ile Glu Lys Lys  
                         355                      360                      365  
Ile Asp Val Lys Phe Ala Ala Ala Leu Leu Ala Ser Lys Glu Ala Gln  
                         370                      375                      380  
Glu Glu Ile Phe Asn Cys Glu Lys Met Lys Asp Asp Ala Thr Ser Ala  
385                      390                      395                      400  
Leu Asp Ser Leu Tyr Asp Glu Ile Arg Pro Ala Ile Glu Glu His Glu  
                         405                      410                      415  
Arg Asp Ser Gln Asp Ser Val Ser Thr Thr Val Ala Glu Lys Trp Ile  
                         420                      425                      430  
Gln Ala Cys Cys Leu Lys Leu Lys Ala Glu Phe Asp Leu Tyr Ser Ser  
                         435                      440                      445  
Ile Val Lys Asn Val Ala Cys Thr Ala Gln Arg Ala Ser Gly Gln Val  
                         450                      455                      460

Lys Pro Thr Glu Val Asp Asn Glu Asn Glu Ile Lys Leu Leu Thr Gly  
 465 470 475 480

<210> 2784

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2784

Met Ile Gly His Lys Thr Ser Leu Asn Lys Phe Lys Lys Ile Glu Ile  
 1 5 10 15  
 Ile Ser Ser Thr Leu Ser Asp His Ser Gly Ile Lys Leu Glu Ile Asn  
 20 25 30  
 Ser Lys Arg Asn Phe Gln Asn His Ala Asn Thr Trp Lys Leu Asn Asn  
 35 40 45  
 Leu Leu Leu Lys Glu His Trp Val Lys Asn Glu Ile Lys Met Glu Ile  
 50 55 60  
 Lys Lys Phe Phe Lys Leu Asn Asp Asn Asn Asp Thr Thr Tyr Gln Lys  
 65 70 75 80  
 Leu Trp Asp Ser Ala Lys Ala Val Leu Arg Gly Lys Phe Ile Ala Leu  
 85 90 95  
 Asn Ala Tyr Ile Glu Thr Ser Glu Arg Ala Gln Thr Asp Asn Leu Arg  
 100 105 110  
 Ser His Leu Lys Glu Leu Glu Lys Gln Lys Gln Thr Lys Pro Lys Pro  
 115 120 125  
 Ser Arg Arg Lys Glu Ile Thr Lys Ile Arg Ala Glu Leu His Glu Ile  
 130 135 140  
 Glu Thr Ser Lys Gln Thr Lys Asn Thr Lys Asp Lys Trp Asn Lys Lys

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Ser Pro Val Phe Ser Phe Ser Pro Glu Pro Gly Ala Gly Asp Glu Ala  
 145 150 155 160  
 Arg Gly Gly Gly Ser Pro Thr Ser Lys Thr Gln Thr Leu Pro Ser Arg  
 165 170 175  
 Gly Pro Arg Gly Gly Gly Ala Gly Glu Gln Pro Pro Pro Pro Ser Ala  
 180 185 190  
 Arg Ser Thr Pro Leu Pro Gly Pro Pro Gly Ser Pro Arg Ser Ser Gly  
 195 200 205  
 Gly Thr Pro Leu His Ser Pro Leu His Thr Pro Arg Ala Ser Pro Thr  
 210 215 220  
 Gly Thr Pro Gly Thr Thr Pro Pro Pro Ser Pro Gly Gly Gly Val Gly  
 225 230 235 240  
 Gly Ala Ala Trp Arg Ser Arg Leu Asn Ser Ile Arg Asn Ser Phe Leu  
 245 250 255  
 Gly Ser Pro Arg Phe His Arg Arg Lys Met Gln Val Pro Thr Ala Glu  
 260 265 270  
 Glu Met Ser Ser Leu Thr Pro Glu Ser Ser Pro Glu Leu Ala Lys Arg  
 275 280 285  
 Ser Trp Phe Gly Asn Phe Ile Ser Leu Asp Lys Glu Glu Gln Ile Phe  
 290 295 300  
 Leu Val Leu Lys Asp Lys Pro Leu Ser Ser Ile Lys Ala Asp Ile Val  
 305 310 315 320  
 His Ala Phe Leu Ser Ile Pro Ser Leu Ser His Ser Val Leu Ser Gln  
 325 330 335  
 Thr Ser Phe Arg Ala Glu Tyr Lys Ala Ser Gly Gly Pro Ser Val Phe  
 340 345 350  
 Gln Lys Pro Val Arg Phe Gln Val Asp Ile Ser Ser Ser Glu Gly Pro  
 355 360 365  
 Glu Pro Ser Pro Arg Arg Asp Gly Ser Gly Gly Gly Gly Ile Tyr Ser

370                      375                      380  
 Val Thr Phe Thr Leu Ile Ser Gly Pro Ser Arg Arg Phe Lys Arg Val  
 385                      390                      395                      400  
 Val Glu Thr Ile Gln Ala Gln Leu Leu Ser Thr His Asp Gln Pro Ser  
                     405                      410                      415  
 Val His Ala Leu Ala Asp Glu Lys Asn Gly Ala Gln Thr Arg Pro Ala  
                     420                      425                      430  
 Gly Ala Pro Pro Arg Ser Leu Gln Pro Pro Pro Gly Arg Pro Asp Pro  
                     435                      440                      445  
 Glu Leu Ser Ser Ser Pro Arg Arg Gly Pro Pro Lys Asp Lys Lys Leu  
                     450                      455                      460  
 Leu Ala Thr Asn Gly Thr Pro Leu Pro  
 465                      470

&lt;210&gt; 2786

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2786

Met Leu Gln Thr Glu Ala Val Arg Thr His Ser Ser Leu Pro Pro Pro  
     1                      5                      10                      15  
 Tyr Ala Leu His Ile Phe Thr Val Cys Ser Leu Gly Trp Pro Leu Arg  
                     20                      25                      30  
 Gln Gly Arg Pro Gly Phe Ser Gly Ala Gly Leu Cys Gly Cys Ser Thr  
                     35                      40                      45  
 Pro Pro Pro Ala Ser Gly Pro Arg Pro Ala Arg Thr Trp Pro Ala Pro  
                     50                      55                      60



Gln Gly Met Pro Gly Gly Trp Asp Lys Ala Val Thr Ser Gly Thr Phe  
 65                      70                      75                      80  
 Glu Met Glu Ile Ile Arg Pro Cys Asn Trp Ile Met Ala Gln Ala Ser  
                          85                      90                      95  
 Ser Ser Arg Ala Glu Trp  
                          100

<210> 2787

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2787

Met Phe Ser Ala Thr Val Ser Val Met Glu Ser Pro Cys Arg Glu Pro  
 1                      5                      10                      15  
 Val Ala Ser Leu Val Pro Asn Leu Asn Arg Ser Ser Leu Ala Ser Ala  
                          20                      25                      30  
 Ser Leu Pro Val Pro Pro Pro Ala Ser Phe Thr Gly Val Cys Lys Pro  
                          35                      40                      45  
 Phe Gly Asp Thr Ser Ala Leu Leu Ser Trp Asp Thr Ser Arg Leu Ile  
                          50                      55                      60  
 Gly Thr Ser Leu Ser Arg Thr Leu Phe Ser Phe Gly Glu Ser Phe Ser  
 65                      70                      75                      80  
 Leu Ala Phe Ser Phe Ile Cys Trp Leu Ser Leu Cys Leu Ala Ser Leu  
                          85                      90                      95  
 Ser Asn Phe Val Asn Ser Ser His Leu Arg Phe Leu Ser Ser Glu Ala  
                          100                      105                      110  
 Phe Ser Leu Glu Ser Asn Ile Phe Ser Ser Gly Phe Val Arg Met Val

115	120	125	
Ser Gly Leu Phe Leu Ser Cys Ser Leu Val Ala Phe Thr Ser Val Phe			
130	135	140	
Phe Pro Arg Met Thr Val Leu Ser Phe Asp Arg Val Leu Ser Glu Ala			
145	150	155	160
Pro Ala Ala Thr Leu Ser Arg Arg Ser Arg Tyr Asp Ser Arg Ala Ile			
165	170	175	
Val Glu Ser Ser Pro Met			
180			

&lt;210&gt; 2788

&lt;211&gt; 489

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2788

Met Ala Ala Glu Val Leu Ser Arg Arg Cys Val Leu Met Arg Leu Leu			
1	5	10	15
Asp Phe Ser Tyr Glu Gln Tyr Gln Lys Ala Leu Arg Gln Ser Ala Gly			
20	25	30	
Ala Val Val Ile Ile Leu Pro Arg Ala Met Ala Ala Val Pro Gln Asp			
35	40	45	
Val Val Arg Gln Phe Met Glu Ile Glu Pro Glu Met Leu Ala Met Glu			
50	55	60	
Thr Ala Val Pro Val Tyr Phe Ala Val Glu Asp Glu Ala Leu Leu Ser			
65	70	75	80
Ile Tyr Lys Gln Thr Gln Ala Ala Ser Ala Ser Gln Gly Ser Ala Ser			
85	90	95	

Ala Ala Glu Val Leu Leu Arg Thr Ala Thr Ala Asn Gly Phe Gln Met  
100 105 110  
Val Thr Ser Gly Val Gln Ser Lys Ala Val Ser Asp Trp Leu Ile Ala  
115 120 125  
Ser Val Glu Gly Arg Leu Thr Gly Leu Gly Gly Glu Asp Leu Pro Thr  
130 135 140  
Ile Val Ile Val Ala His Tyr Asp Ala Phe Gly Val Ala Pro Trp Leu  
145 150 155 160  
Ser Leu Gly Ala Asp Ser Asn Gly Ser Gly Val Ser Val Leu Leu Glu  
165 170 175  
Leu Ala Arg Leu Phe Ser Arg Leu Tyr Thr Tyr Lys Arg Thr His Ala  
180 185 190  
Ala Tyr Asn Leu Leu Phe Phe Ala Ser Gly Gly Gly Lys Phe Asn Tyr  
195 200 205  
Gln Gly Thr Lys Arg Trp Leu Glu Asp Asn Leu Asp His Thr Asp Ser  
210 215 220  
Ser Leu Leu Gln Asp Asn Val Ala Phe Val Leu Cys Leu Asp Thr Val  
225 230 235 240  
Gly Arg Gly Ser Ser Leu His Leu His Val Ser Lys Pro Pro Arg Glu  
245 250 255  
Gly Thr Leu Gln His Ala Phe Leu Arg Glu Leu Glu Thr Val Ala Ala  
260 265 270  
His Gln Phe Pro Glu Val Arg Phe Ser Met Val His Lys Arg Ile Asn  
275 280 285  
Leu Ala Glu Asp Val Leu Ala Trp Glu His Glu Arg Phe Ala Ile Arg  
290 295 300  
Arg Leu Pro Ala Phe Thr Leu Ser His Leu Glu Ser His Arg Asp Gly  
305 310 315 320  
Gln Arg Ser Ser Ile Met Asp Val Arg Ser Arg Val Asp Ser Lys Thr

325 330 335  
Leu Thr Arg Asn Thr Arg Ile Ile Ala Glu Ala Leu Thr Arg Val Ile  
340 345 350  
Tyr Asn Leu Thr Glu Lys Gly Thr Pro Pro Asp Met Pro Val Phe Thr  
355 360 365  
Glu Gln Met Gln Ile Gln Gln Glu Gln Leu Asp Ser Val Met Asp Trp  
370 375 380  
Leu Thr Asn Gln Pro Arg Ala Ala Gln Leu Val Asp Lys Asp Ser Thr  
385 390 395 400  
Phe Leu Ser Thr Leu Glu His His Leu Ser Arg Tyr Leu Lys Asp Val  
405 410 415  
Lys Gln His His Val Lys Ala Asp Lys Arg Asp Pro Glu Phe Val Phe  
420 425 430  
Tyr Asp Gln Leu Lys Gln Val Met Asn Ala Tyr Arg Val Lys Pro Ala  
435 440 445  
Val Phe Asp Leu Leu Leu Ala Val Gly Ile Ala Ala Tyr Leu Gly Met  
450 455 460  
Ala Tyr Val Ala Val Gln His Phe Ser Leu Leu Tyr Lys Thr Val Gln  
465 470 475 480  
Arg Leu Leu Val Lys Ala Lys Thr Gln  
485

&lt;210&gt; 2789

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2789

Met Ser Tyr Leu Leu Val Ser Leu Val Trp Ser Glu Arg Pro Ser Leu  
 1 5 10 15  
 Ala His Leu Pro Arg Ala Leu Gly Ser Trp Cys Ala Gly Cys Gln Pro  
 20 25 30  
 Gly Ser Pro Ala Leu Leu Gly Asp Ala Pro Gly Leu Arg Gly Pro Gly  
 35 40 45  
 Trp Leu Trp Ser Arg Asp Ser Trp Gly Arg Gly Pro Ala Ser Asp Cys  
 50 55 60  
 Pro Gly Pro Gln Pro Pro Pro Leu Gln Gly Ile Gly Val Met Cys Ser  
 65 70 75 80  
 Ile Ile Gly Trp Gly Val Cys Val Cys Val Cys Val Cys Val Tyr Val  
 85 90 95  
 Cys Met Arg Leu Ala His Gly Lys Ala Gln Ala Asn Pro Ala Pro Arg  
 100 105 110  
 Arg Trp Ala Ala Thr Leu Pro Pro Lys His Gly Asp Val Ala Ala Ala  
 115 120 125  
 Leu Gly Pro Pro Val Gly Pro Met Gly Glu Glu Leu Pro Phe Ala Gly  
 130 135 140  
 Val Gly Ser Leu Pro  
 145

&lt;210&gt; 2790

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2790

Met Asp Arg Phe Pro Ile Leu Phe Leu Leu Ala Thr Leu Ile Thr Leu

1	5	10	15
Ala Ser Gly Ala Arg His Asp Ile Leu Arg Leu Pro Ser Glu Ala Ser			
20	25	30	
Thr Phe Phe Lys Ala Pro Gly Gly Asp Gln Asn Asp Glu Gly Thr Arg			
35	40	45	
Trp Ala Val Leu Ile Ala Gly Ser Asn Gly Tyr Trp Asn Tyr Arg His			
50	55	60	
Gln Ser Asp Val Cys His Ala Tyr Gln Leu Leu Arg Lys Gly Gly Leu			
65	70	75	80
Lys Glu Glu Asn Ile Val Val Phe Met Tyr Asp Asp Ile Ala Phe Asn			
85	90	95	
Glu Glu Asn Pro Arg Pro Gly Val Ile Ile Asn Ser Pro His Gly Asn			
100	105	110	
Asp Val Tyr Lys Gly Val Pro Lys Asp Tyr Ile Gly Glu Asp Val Thr			
115	120	125	
Val Gly Asn Phe Phe Ala Ala Ile Leu Gly Asn Lys Ser Ala Leu Thr			
130	135	140	
Gly Gly Ser Gly Lys Val Val Asp Ser Gly Pro Asn Asp His Ile Phe			
145	150	155	160
Ile Tyr Tyr Ser Asp His Gly Gly Pro Gly Val Leu Gly Met Pro Thr			
165	170	175	
Asn Pro Tyr Val Tyr Ala Ser Asp Leu Ile Glu Val Leu Lys Lys Lys			
180	185	190	
His Ala Ser Gly Ser Tyr Lys Ser Leu Val Phe Tyr Leu Glu Ala Cys			
195	200	205	
Glu Ser Gly Ser Ile Phe Glu Gly Leu Leu Pro Glu Gly Leu Asn Ile			
210	215	220	
Tyr Ala Thr Thr Ala Ser Asn Ala Glu Glu Ser Ser Trp Gly Thr Tyr			
225	230	235	240

Cys Pro Gly Glu Tyr Pro Ser Pro Pro Ser Glu Tyr Glu Thr Cys Leu  
245 250 255  
Gly Asp Leu Tyr Ser Val Ala Trp Met Glu Asp Ser Asp Ile His Asn  
260 265 270  
Leu Gln Thr Glu Thr Leu His Gln Gln Tyr Glu Leu Val Lys Gln Arg  
275 280 285  
Thr Met Asn Gly Asn Ser Ile Tyr Gly Ser His Val Met Gln Tyr Gly  
290 295 300  
Asp Ile Gly Leu Ser Glu Asn Asn Leu Val Leu Tyr Leu Gly Thr Asn  
305 310 315 320  
Pro Ala Asn Asp Asn Phe Thr Phe Val Leu Lys Asn Ser Leu Val Pro  
325 330 335  
Pro Ser Lys Ala Val Asn Gln Arg Asp Ala Asp Leu Ile His Phe Trp  
340 345 350  
Asp Lys Phe Arg Lys Ala Pro Val Gly Ser Ser Arg Lys Ala Ala Ala  
355 360 365  
Glu Lys Gln Ile Leu Glu Ala Met Ser His Arg Met His Ile Asp Asp  
370 375 380  
Ser Met Lys Arg Ile Gly Lys Leu Phe Phe Gly Ile Glu Lys Gly Pro  
385 390 395 400  
Glu Leu Leu Ser Ser Val Arg Pro Ala Gly Gln Pro Leu Val Asp Asp  
405 410 415  
Trp Asp Cys Leu Lys Thr Leu Val Arg Thr Phe Glu Thr His Cys Gly  
420 425 430  
Ser Leu Ser Gln Tyr Gly Met Lys His Met Arg Ser Phe Ala Asn Phe  
435 440 445  
Cys Asn Ala Gly Ile Arg Lys Glu Gln Met Ala Glu Ala Ser Ala Gln  
450 455 460  
Ala Cys Val Asn Ile Pro Ala Ser Ser Trp Ser Ser Met His Arg Gly

465                                      470                                      475                                      480  
Phe Ser Ala

<210> 2791

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2791

Met Ala Glu Asn Lys Tyr Ile Cys His Glu Leu Gly Leu Tyr Gly Ile  
1                                      5                                      10                                      15  
Ile Glu Cys Ser Tyr Trp Ser Tyr Val Ile Trp Ala Thr Trp Lys Lys  
20                                      25                                      30  
Asp Glu Lys Asp Pro Val Cys Leu Gln Lys Gly Lys Ser Asn Ser Ser  
35                                      40                                      45  
Cys Thr Ser Gly Asn Cys Asn Pro Leu Glu Leu Ile Ile Thr Asn Pro  
50                                      55                                      60  
Gln Asp Pro His Trp Lys Thr Gly Glu Asn Val Asn Leu Gly Ile Asp  
65                                      70                                      75                                      80  
Gly Thr Gly Leu Asp Pro Arg Val Asn Leu Leu Ile Gln Gly Glu Ile  
85                                      90                                      95  
His Lys Arg Ser Pro Lys Pro Val Phe Gln Thr Phe  
100                                      105

<210> 2792

<211> 319



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2792

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Met Lys Ile Asp Ile His Ser His Ile Leu Pro Lys Glu Trp Pro Asp
  1             5             10             15
Leu Lys Lys Arg Phe Gly Tyr Gly Gly Trp Val Gln Leu Gln His His
      20             25             30
Ser Lys Gly Glu Ala Lys Leu Leu Lys Asp Gly Lys Val Phe Arg Val
      35             40             45
Val Arg Glu Asn Cys Trp Asp Pro Glu Val Arg Ile Arg Glu Met Asp
      50             55             60
Gln Lys Gly Val Thr Val Gln Ala Leu Ser Thr Val Pro Val Met Phe
      65             70             75             80
Ser Tyr Trp Ala Lys Pro Glu Asp Thr Leu Asn Leu Cys Gln Leu Leu
      85             90             95
Asn Asn Asp Leu Ala Ser Thr Val Val Ser Tyr Pro Arg Arg Phe Val
      100            105            110
Gly Leu Gly Thr Leu Pro Met Gln Ala Pro Glu Leu Ala Val Lys Glu
      115            120            125
Met Glu Arg Cys Val Lys Glu Leu Gly Phe Pro Gly Val Gln Ile Gly
      130            135            140
Thr His Val Asn Glu Trp Asp Leu Asn Ala Gln Glu Leu Phe Pro Val
      145            150            155            160
Tyr Ala Ala Ala Glu Arg Leu Lys Cys Ser Leu Phe Val His Pro Trp
      165            170            175
Asp Met Gln Met Asp Gly Arg Met Ala Lys Tyr Trp Leu Pro Trp Leu
      180            185            190
Val Gly Met Pro Ala Glu Thr Thr Ile Ala Ile Cys Ser Met Ile Met

```

195	200	205
Gly Gly Val Phe Glu Lys Phe Pro Lys Leu Lys Val Cys Phe Ala His		
210	215	220
Gly Gly Gly Ala Phe Pro Phe Thr Val Gly Arg Ile Ser His Gly Phe		
225	230	235
Ser Met Arg Pro Asp Leu Cys Ala Gln Asp Asn Pro Met Asn Pro Lys		
245	250	255
Lys Tyr Leu Gly Ser Phe Tyr Thr Asp Ala Leu Val His Asp Pro Leu		
260	265	270
Ser Leu Lys Leu Leu Thr Asp Val Ile Gly Lys Val Ser Pro Val Cys		
275	280	285
His Leu Asp Gly Leu Trp Gly Ala Glu Cys Cys Ile Ser Asn Pro Phe		
290	295	300
Ser Leu Leu Trp Leu Leu Ser Lys Lys Gly Met Glu Glu Arg Tyr		
305	310	315

&lt;210&gt; 2793

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2793

Met Val Ser Glu Glu Leu Thr Gly Lys Arg Arg Asp Pro Ile Leu Val		
1	5	10
Leu Val Leu Gly Thr Tyr Thr Leu Trp Val Leu Arg Lys Gly Trp Ser		
20	25	30
Tyr Asn Asp Ser Lys Leu Phe Ser His Trp Ser Tyr Asn Asn Ser Lys		
35	40	45

Leu Phe Ser Gln Arg Gln Lys His Asp Phe Lys Met Thr Ser Leu Val  
 50 55 60  
 Arg Phe Ser Gly Val Trp Lys Asp Leu Ile Ile Leu Pro Leu Leu Lys  
 65 70 75 80  
 Pro Glu Thr Tyr Asn Leu Lys Pro Glu Ile Tyr His Lys Glu Leu Gly  
 85 90 95  
 Lys Leu Cys Gln Ile Pro  
 100

<210> 2794

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2794

Met Thr Glu Leu Cys Asn Gly Arg Arg Ala Met Cys Ser Gly Asp Gln  
 1 5 10 15  
 Phe Thr Val Leu Cys Arg Asp Arg Lys Lys Pro Phe Ile Arg Ala Ala  
 20 25 30  
 Gly Trp Glu Pro Gly Arg Arg Lys Asp His Asp Pro Leu Pro Gly Thr  
 35 40 45  
 Trp Pro Phe Cys Thr Pro Gln Ser Pro Ser Arg Cys His Asn Glu Lys  
 50 55 60  
 Ala His Ile Leu Gly Thr Ala Leu Glu Ala Phe His His Trp Leu His  
 65 70 75 80  
 Ser Pro Leu Gln Thr His Cys Leu Ala Pro Thr Leu Phe Arg Pro Pro  
 85 90 95  
 His Ser Met Leu Ser Thr Ala Ser Thr Pro Ala Thr

100

105

&lt;210&gt; 2795

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2795

Met Gly Leu Ala Thr Phe His Ala Leu Cys Val Leu Leu Thr Cys Leu  
1 5 10 15  
Ser Ser Arg Ser Tyr Arg Leu Gln Ile Gly His Phe Leu Cys Leu Val  
20 25 30  
Ile Leu Val Tyr Cys Ala Glu Tyr Ile Asn Glu Ala Ala Ala Met Asn  
35 40 45  
Trp Arg Leu Phe Ser Lys Tyr Gln Tyr Phe Asp Ser Arg Gly Met Phe  
50 55 60  
Ile Ser Ile Val Phe Ser Ala Pro Leu Leu Val Asn Ala Met Ile Ile  
65 70 75 80  
Val Val Met Trp Val Trp Lys Thr Leu Asn Val Met Thr Asp Leu Lys  
85 90 95  
Asn Ala Gln Glu Arg Arg Lys Glu Lys Lys Arg Arg Arg Lys Glu Asp  
100 105 110

&lt;210&gt; 2796

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2796

Met Gln Ser Ser Leu Lys Leu Val Asp Cys Ile Ile Glu Val His Asp  
 1 5 10 15  
 Ala Arg Ile Pro Leu Ser Gly Arg Asn Pro Leu Phe Gln Glu Thr Leu  
 20 25 30  
 Gly Leu Lys Pro His Leu Leu Val Leu Asn Lys Met Asp Leu Ala Asp  
 35 40 45  
 Leu Thr Glu Gln Gln Lys Ile Met Gln His Leu Glu Gly Glu Gly Leu  
 50 55 60.  
 Lys Asn Val Ile Phe Thr Asn Cys Val Lys Asp Glu Asn Val Lys Gln  
 65 70 75 80  
 Ile Ile Pro Met Val Thr Glu Leu Ile Gly Arg Ser His Arg Tyr His  
 85 90 95  
 Arg Lys Glu Asn Leu Glu Tyr Cys Ile Met Val Ile Gly Val Pro Asn  
 100 105 110  
 Val Gly Lys Ser Ser Leu Ile Asn Ser Leu Arg Arg Gln His Leu Arg  
 115 120 125  
 Lys Gly Lys Ala Thr Arg Val Gly Gly Glu Pro Gly Ile Thr Arg Ala  
 130 135 140  
 Val Met Ser Lys Ile Gln Val Glu Ser Ser Gly Ala Arg Pro Ser Thr  
 145 150 155 160  
 Leu Ser Arg Ala Leu Gln Ala Ser Gly Thr Cys Arg Pro Leu Cys Gly  
 165 170 175  
 Phe Arg Leu Leu Thr Thr Leu Pro Ser Pro Pro Leu Ser Val Pro Ala  
 180 185 190  
 Glu His Pro Arg Gly Arg His Cys Pro Cys Pro Tyr Ser Thr Val Val  
 195 200 205  
 Ile Val Phe Ala Pro Asn Leu Trp Gly Arg His Ala Val Phe Pro Ile

出証特 2 0 0 4 - 3 0 5 9 6 6 0

His Phe Gly Ser Pro Cys Leu Pro Gly Val Lys Lys Tyr Leu Thr Val  
 145                      150                      155                      160  
 Thr Tyr Ala Cys Val Pro Lys Asn Ile Leu Thr Ala Ile Asp Pro Ala  
                          165                      170                      175  
 Ile Ala Asn Leu Lys Pro Ser Leu Lys Gln Lys Asp Gly Glu Tyr Gly  
                          180                      185                      190  
 Ile Asn Phe Asp Pro Ser Gly Ser Lys Val Leu Arg Lys Asp Gly Ile  
                          195                      200                      205  
 Leu Val Ser Asn Ser Leu Ala Ala Phe Ala Tyr Ile Arg Ala His Pro  
                          210                      215                      220  
 Glu Arg Ala Ala Leu Leu Phe Val Ser Ser Val Cys Ile Gly Leu Ala  
 225                      230                      235                      240  
 Leu Thr Leu Cys Ala Leu Val Ile Arg Glu Ser Cys Ala Lys Asp Phe  
                          245                      250                      255  
 Arg Asp Leu Gln Leu Gly Arg Glu Gln Leu Val Pro Gly Ser Asp Lys  
                          260                      265                      270  
 Val Glu Glu Asp Ser Glu Asp Glu Glu Glu Glu Glu Asp Pro Ser Glu  
                          275                      280                      285  
 Ser Asp Phe Pro Gly Glu Leu Ser Gly Phe Cys Arg Thr Ser Tyr Pro  
                          290                      295                      300  
 Ile Tyr Ser Ser Ile Glu Ala Ala Glu Leu Ala Glu Arg Ile Glu Arg  
 305                      310                      315                      320  
 Arg Glu Gln Ile Ile Gln Glu Ile Trp Met Asn Ser Gly Leu Asp Thr  
                          325                      330                      335  
 Ser Leu Pro Arg Asn Met Gly Gln Phe Tyr  
                          340                      345

&lt;210&gt; 2798

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2798

Met Met Glu Lys Ile Pro Ile Leu Arg Ser Leu Arg Ala Arg Glu Gln

1 5 10 15

Gln Ala Gly Lys Asp Val Thr Leu Gln Gly Glu His Gln His Leu Pro

20 25 30

Glu Pro Gly Cys Gln Gln Thr Val Pro Leu Ser Val Gly Arg Arg Pro

35 40 45

Pro Asp Thr Pro Gly Pro Glu Thr Asn Ser Met Glu Ala Ala Pro Gly

50 55 60

Ser Pro Pro Gly Glu Gly Ala Pro Leu Ala Ala Asp Val Tyr Val Gly

65 70 75 80

Asn Leu Pro Gly Asp Ala Arg Val Ser Asp Leu Lys Arg Ala Leu Arg

85 90 95

Glu Leu Gly Ser Val Pro Leu Arg Leu Thr Trp Gln Gly Pro Arg Arg

100 105 110

Arg Ala Phe Leu His Tyr Pro Asp Ser Ala Ala Ala Gln Gln Ala Val

115 120 125

Ser Cys Leu Gln Gly Leu Arg Leu Gly Thr Asp Thr Leu Arg Val Ala

130 135 140

Leu Ala Arg Gln Gln Arg Asp Lys

145 150

&lt;210&gt; 2799

&lt;211&gt; 105



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2799

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Met Gly His Ser Arg Val Thr Leu Asn Leu Gln Asp Arg Arg Arg Pro
  1             5             10             15
Ser Ser Gly Leu Leu Ser His Lys Gly Pro Pro Phe Lys Ala Glu Glu
          20             25             30
Pro Pro Arg Ser Lys Glu Gly Ala Phe Gly Gly Ser Ile Ser Cys Leu
          35             40             45
Ser Gln Ile Leu Ala Pro Pro Gln Gly Cys Ser Gln Gly Cys Val Gln
          50             55             60
Glu Ala Lys Asp Pro Arg Pro Ser Ala Gln Leu Leu Pro Thr Arg Thr
          65             70             75             80
Thr Cys Leu Ser Arg Gly Ser His Leu Leu His Arg Phe Arg Asn Arg
          85             90             95
Leu His Val His Gly Ala Gly Pro Arg
          100             105

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&lt;210&gt; 2800

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2800

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Met Gly Thr Arg Arg Ser Lys Ala Glu Glu Gly Gly Gly Asp Met Arg
  1             5             10             15
Pro Leu Gln Ser Leu Ser Gly Ile Arg Asp Leu Arg Ala Cys Ser Pro

```

20 25 30  
 Gly Tyr Ser Thr Leu Ser Ala Glu Asp Asn Val Ser Leu Gly Gln Pro  
 35 40 45  
 Pro Leu Gly Leu Gly Asn Thr Thr Leu Arg Pro Gln Cys Pro Leu Phe  
 50 55 60  
 Leu Ser Pro Ser Trp Val Gly Gly Gly Leu Phe Lys Asp Ile Pro Thr  
 65 70 75 80  
 Gly Phe Gly Ala Lys Pro Phe Leu Gln Arg Glu Lys Arg Val Ser Arg  
 85 90 95  
 Arg Ser Val Arg Arg  
 100

&lt;210&gt; 2801

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2801

Met Arg Val Ala Ala Leu Ile Ser Gly Gly Lys Asp Ser Cys Tyr Asn  
 1 5 10 15  
 Met Met Gln Cys Ile Ala Ala Gly His Gln Ile Val Ala Leu Ala Asn  
 20 25 30  
 Leu Arg Pro Ala Glu Asn Gln Val Gly Ser Asp Glu Leu Asp Ser Tyr  
 35 40 45  
 Met Tyr Gln Thr Val Gly His His Ala Ile Asp Leu Tyr Ala Glu Ala  
 50 55 60  
 Met Ala Leu Pro Leu Tyr Arg Arg Thr Ile Arg Gly Arg Ser Leu Asp  
 65 70 75 80

Thr Arg Gln Val Tyr Thr Lys Cys Glu Gly Asp Glu Val Glu Asp Leu  
                             85                            90                            95  
 Tyr Glu Leu Leu Lys Leu Val Lys Gly Ile Thr Arg Met Thr Leu Leu  
                             100                            105                            110  
 Ala Glu Tyr Asp Ala Leu Asn Leu Gln Asp Phe His Met His Leu Lys  
                             115                            120                            125  
 Val Gly Ser Gln Ala Ile Val Tyr Arg Thr Pro Asn Glu Leu Cys Thr  
                             130                            135                            140  
 His Ser Lys Phe Asp Lys His Thr Phe Pro Pro Phe Ile Ser Glu Ile  
                             145                            150                            155                            160  
 Ala Lys Cys Glu Val  
                             165

<210> 2802

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2802

Met Arg Thr Ser Ser Trp His Leu Ser Pro His Pro Met Cys His Gly  
           1                            5                            10                            15  
 Gly Arg Phe Cys Arg Pro Pro Pro Pro Gly Ala Pro Arg Ala Val Pro  
                             20                            25                            30  
 Gly Pro Val Ala Ser Lys Gly Gly Cys Ser Trp Ala Leu Leu Ala Trp  
                             35                            40                            45  
 Thr Ala Ala Leu Ala Ala Leu Gly Glu Gly Pro Leu Val Gln Pro Ala  
                             50                            55                            60  
 Phe Leu Leu Leu Gly Phe Arg Val Thr Asp Ala Pro Ser Cys Gly Val

65	70	75	80
Val	Ser His Ile Cys Phe Ala Val	Lys Lys Trp Gly Thr Pro Ser Pro	
	85	90	95
Gly Leu Gln Ser Pro Ala Leu Pro	Leu Ser Gly Asp Gly Phe Gln Gln		
	100	105	110
Leu Leu Ala Leu Gly Ala Lys Leu Leu Phe	Gln Glu Ala Phe Gly Glu		
	115	120	125
Leu Gly Ser Glu Leu Trp Gly Gly Thr Ala Leu Leu Cys Arg Leu Pro			
	130	135	140
Pro Ser Ser Pro Pro Gly Ser Leu Asp Pro Thr Leu Ala Pro Leu Leu			
145	150	155	160
Thr Gly Thr Gly Gly Ser Gly Val Arg Gly Leu Leu Pro Leu His Pro			
	165	170	175
Asp Phe Leu Val Cys Met Gly Ser Ser Pro Pro Leu			
	180	185	

&lt;210&gt; 2803

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2803

Met Gly Arg Val Gly Thr Asp Ala Gly Ile Ala His Lys Met Leu Ala			
1	5	10	15
Gln Gly Thr Leu His Gly Arg Ser Leu Gln Glu Ser Lys Val Thr Thr			
	20	25	30
Phe Arg Asp Ser Leu His Ser Glu Ala Arg Arg Ala Trp Pro Thr Lys			
	35	40	45

Arg Gly Trp Glu Asp Val Ala Cys Trp Ser Gly Gln Pro Ser Asp Gln  
 50 55 60  
 Gly Gly Arg Val Arg Leu Gly Gly Trp Cys Pro Leu Val Arg Ala Ala  
 65 70 75 80  
 Glu Arg Gly Trp Glu Asp Gly Ala Cys Trp Ser Gly Gln Pro Ser Gly  
 85 90 95  
 Gln Gly Gly Gln Ala Arg Gln Gly Gly Arg Tyr Pro Pro Val Arg Ala  
 100 105 110  
 Ala Glu Gln Ser Trp Lys Asp Gly Ala Cys Trp Ser Gly Arg Leu Asn  
 115 120 125  
 Glu Ala Gly Arg Met Val Ser Ala Gly Gln Gly Ser Ser Gly Gly Ala  
 130 135 140  
 Ala Gln Glu Val Leu Ser Arg Gln Ser Leu Gly Leu Val Trp Val Cys  
 145 150 155 160  
 His Ala Pro Glu Lys Phe Leu Gly Cys Gly Phe Asn Val Leu Leu Gln  
 165 170 175

&lt;210&gt; 2804

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2804

Met Val Ala Trp Arg Ser Ala Phe Leu Val Cys Leu Ala Phe Ser Leu  
 1 5 10 15  
 Ala Thr Leu Val Gln Arg Gly Ser Gly Asp Phe Asp Asp Phe Asn Leu  
 20 25 30  
 Glu Asp Ala Val Lys Glu Thr Ser Ser Val Lys Gln Pro Trp Asp His

35	40	45
Thr Thr Thr Thr Thr Thr	Asn Arg Pro Gly Thr Thr	Arg Ala Pro Ala
50	55	60
Lys Pro Pro Gly Pro Thr	Glu Gly Ser Gly Leu Asp	Leu Ala Asp Ala
65	70	75
Leu Asp Asp Gln Asp Asp	Gly Arg Arg Lys Pro Gly	Ile Gly Gly Arg
85	90	95
Glu Arg Trp Asn His Val	Thr Thr Thr Thr Lys Arg	Pro Val Thr Thr
100	105	110
Arg Ala Pro Ala Asn Thr	Leu Gly Asn Asp Phe Asp	Leu Ala Asp Ala
115	120	125
Leu Asp Asp Gln Asn Asp	Arg Asp Asp Gly Arg Arg	Lys Pro Ile Ala
130	135	140
Gly Gly Gly Gly Phe Ser	Asp Lys Asp Leu Glu Asp	Ile Val Gly Gly
145	150	155
Gly Glu Tyr Lys Pro Asp	Lys Gly Lys Gly Asp Gly	Arg Tyr Gly Ser
165	170	175
Asn Asp Asp Pro Gly Ser	Gly Met Val Ala Glu Pro	Gly Thr Ile Ala
180	185	190
Gly Val Ala Ser Ala Leu	Ala Met Ala Leu Ile Gly	Ala Val Ser Ser
195	200	205
Tyr Ile Ser Tyr Gln Gln	Lys Lys Phe Cys Phe Ser	Ile Gln His Ala
210	215	220
Ala Ala Gly Gln Glu Gly	Leu Asn Ala Asp Tyr Val	Lys Gly Glu Asn
225	230	235
Leu Glu Ala Val Val Cys	Glu Glu Pro Gln Val Lys	Tyr Ser Thr Leu
245	250	255
His Thr Gln Ser Ala Glu	Pro Pro Pro Pro Pro Glu	Pro Ala Arg Ile
260	265	270

&lt;210&gt; 2805

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

Met Pro Arg Cys Ala Lys Ala Lys Ser Gln Pro His Phe Pro Val Leu

1 5 10 15

Ala Gln Tyr Ile Leu Asn Glu Ser Glu Ala Arg Val Lys Ala Glu Leu

20 25 30

Trp Met Arg Glu Asn Ala Glu Tyr Leu Arg Glu Gln Arg Glu Lys Glu

35 40 45

Ala Arg Ile Ala Lys Glu Lys Glu Leu Gly Ile Tyr Lys Glu His Lys

50 55 60

Pro Lys Lys Ser Cys Lys Arg Arg Glu Pro Ile Gln Ala Ser Thr Ala

65 70 75 80

Arg Glu Ala Ile Glu Lys Met Leu Glu Gln Lys Lys Ile Ser Ser Lys

85 90 95

Ile Asn Tyr Ser Val Leu Arg Gly Leu Ser Ser Ala Gly Gly Gly Ser

100 105 110

Pro His Arg Glu Asp Ala Gln Pro Glu His Ser Ala Ser Ala Arg Lys

115 120 125

Leu Ser Arg Arg Arg Thr Pro Ala Ser Arg Ser Gly Ala Asp Pro Val

130 135 140

Thr Ser Val Gly Lys Arg Leu Arg Pro Leu Val Ser Thr Gln Pro Ala

145 150 155 160

Lys Lys Val Ala Thr Gly Glu Val Cys Cys Pro Thr Gln Pro Gly Gln

	165		170		175
Gly	Asp	Leu	Gly	Arg	Gln
			Pro	Thr	Ser
			Ser	Ser	Trp
			Ala	Gln	Met
			Leu	Gly	
	180		185		190
Leu					

&lt;210&gt; 2806

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2806

Met	Ser	Ala	Met	Gly	Ser	Val	Arg	Pro	Val	Ala	Gly	Gln	His	Ser	His
1			5						10					15	
Leu	Arg	Ala	Gly	Ala	Pro	Val	Leu	Pro	Arg	Pro	Trp	Ala	Cys	Phe	Ala
			20						25					30	
Asn	Thr	Ser	Met	Ala	Gly	Ala	Ser	Pro	Gly	Asn	Trp	Leu	Gln	Leu	Ser
			35						40					45	
Val	Thr	His	Gly	Arg	Gln	Cys	Arg	Ala	Gly	Arg	Arg	Gly	Asp	Gln	Arg
			50						55					60	
Leu	Ser	Leu	Thr	Leu	Pro	His	Gly	Val	Ser	Thr	Ala	Ala	Ala	Ser	Leu
			65						70					75	
Gly	Pro	Gln	Leu	Leu	Glu	Tyr	Glu	Phe	Ser	Phe	Leu	Pro	Gly	Trp	Ser
			85						90					95	
Ser	Pro	Gln	His	Trp	Asn	Pro	His	Pro	His	Pro	Leu	Ser	Cys	Pro	Leu
			100						105					110	
Lys	Gly	Leu	Glu	Phe	Pro	Ala	Leu	Val	Cys	Leu	Trp	Val	Ala	Pro	Gln
			115						120					125	



Ala Pro Val Gly Arg Phe Ser Ser Cys His Thr Phe Gly Thr Ser Ser

130

135

140

Ser Val Asn Ser Leu His

145

150

<210> 2807

<211> 572

<212> PRT

<213> Homo sapiens

<400> 2807

Met Glu Phe Val Leu Ser Val Ala Gly Glu Ile Ile Gly Leu Gly Asn

1

5

10

15

Val Trp Arg Phe Pro Tyr Leu Cys Tyr Lys Asn Gly Gly Gly Ala Phe

20

25

30

Phe Ile Pro Tyr Phe Ile Phe Phe Phe Val Cys Gly Ile Pro Val Phe

35

40

45

Phe Leu Glu Val Ala Leu Gly Gln Tyr Thr Ser Gln Gly Ser Val Thr

50

55

60

Ala Trp Arg Lys Ile Cys Pro Leu Phe Gln Gly Ile Gly Leu Ala Ser

65

70

75

80

Val Val Ile Glu Ser Tyr Leu Asn Val Tyr Tyr Ile Ile Ile Leu Ala

85

90

95

Trp Ala Leu Phe Tyr Leu Phe Ser Ser Phe Thr Ser Glu Leu Pro Trp

100

105

110

Thr Thr Cys Asn Asn Phe Trp Asn Thr Glu His Cys Thr Asp Phe Leu

115

120

125

Asn His Ser Gly Ala Gly Thr Val Thr Pro Phe Glu Asn Phe Thr Ser

130 135 140  
Pro Val Met Glu Phe Trp Glu Arg Arg Val Leu Gly Ile Thr Ser Gly  
145 150 155 160  
Ile His Asp Leu Gly Ser Leu Arg Trp Glu Leu Ala Leu Cys Leu Leu  
165 170 175  
Leu Ala Trp Val Ile Cys Tyr Phe Cys Ile Trp Lys Gly Val Lys Ser  
180 185 190  
Thr Gly Lys Val Val Tyr Phe Thr Ala Thr Phe Pro Tyr Leu Met Leu  
195 200 205  
Val Ile Leu Leu Ile Arg Gly Val Thr Leu Pro Gly Ala Tyr Gln Gly  
210 215 220  
Ile Ile Tyr Tyr Leu Lys Pro Asp Leu Phe Arg Leu Lys Asp Pro Gln  
225 230 235 240  
Val Trp Met Asp Ala Gly Thr Gln Ile Phe Phe Ser Phe Ala Ile Cys  
245 250 255  
Gln Gly Cys Leu Thr Ala Leu Gly Ser Tyr Asn Lys Tyr His Asn Asn  
260 265 270  
Cys Tyr Lys Asp Cys Ile Ala Leu Cys Phe Leu Asn Ser Ala Thr Ser  
275 280 285  
Phe Val Ala Gly Phe Val Val Phe Ser Ile Leu Gly Phe Met Ser Gln  
290 295 300  
Glu Gln Gly Val Pro Ile Ser Glu Val Ala Glu Ser Gly Pro Gly Leu  
305 310 315 320  
Ala Phe Ile Ala Phe Pro Lys Ala Val Thr Met Met Pro Leu Ser Gln  
325 330 335  
Leu Trp Ser Cys Leu Phe Phe Ile Met Pro Ile Phe Leu Gly Leu Asp  
340 345 350  
Ser Gln Phe Val Cys Val Glu Cys Leu Val Thr Ala Ser Ile Asp Met  
355 360 365

Phe Pro Arg Gln Leu Arg Lys Ser Gly Arg Arg Glu Leu Leu Ile Leu  
370 375 380

Thr Ile Ala Val Met Cys Tyr Leu Ile Gly Leu Phe Leu Val Thr Glu  
385 390 395 400

Gly Gly Met Tyr Ile Phe Gln Leu Phe Asp Tyr Tyr Ala Ser Ser Gly  
405 410 415

Ile Cys Leu Leu Phe Leu Ser Leu Phe Glu Val Val Cys Ile Ser Trp  
420 425 430

Val Tyr Gly Ala Asp Arg Phe Tyr Asp Asn Ile Glu Asp Met Ile Gly  
435 440 445

Tyr Arg Pro Trp Pro Leu Val Lys Ile Ser Trp Leu Phe Leu Thr Pro  
450 455 460

Gly Leu Cys Leu Ala Thr Phe Leu Phe Ser Leu Ser Lys Tyr Thr Pro  
465 470 475 480

Leu Lys Tyr Asn Asn Val Tyr Val Tyr Pro Pro Trp Gly Tyr Ser Ile  
485 490 495

Gly Trp Phe Leu Ala Leu Ser Ser Met Val Cys Val Pro Leu Phe Val  
500 505 510

Val Ile Thr Leu Leu Lys Thr Arg Gly Pro Phe Arg Lys Arg Leu Arg  
515 520 525

Gln Leu Ile Thr Pro Asp Ser Ser Leu Pro Gln Pro Lys Gln His Pro  
530 535 540

Cys Leu Asp Gly Ser Ala Gly Arg Asn Phe Gly Pro Ser Pro Thr Arg  
545 550 555 560

Glu Gly Leu Ile Ala Gly Glu Lys Glu Thr His Leu  
565 570

&lt;210&gt; 2808

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met Asp Ser Val Glu Lys Thr Thr Asn Arg Ser Glu Gln Lys Ser Arg

1 5 10 15

Lys Phe Leu Lys Ser Leu Ile Arg Lys Gln Pro Gln Glu Leu Leu Leu

20 25 30

Val Ile Gly Thr Gly Val Ser Ala Ala Val Ala Pro Gly Ile Pro Ala

35 40 45

Leu Cys Ser Trp Arg Ser Cys Ile Glu Ala Val Ile Glu Ala Ala Glu

50 55 60

Gln Leu Glu Val Leu His Pro Gly Asp Val Ala Glu Phe Arg Arg Lys

65 70 75 80

Val Thr Lys Asp Arg Asp Leu Leu Val Val Ala His Asp Leu Ile Arg

85 90 95

Lys Met Ser Pro Arg Thr Gly Asp Ala Lys Pro Ser Phe Phe Gln Asp

100 105 110

Cys Leu Met Glu Val Phe Asp Asp Leu Glu Gln His Ile Arg Ser Pro

115 120 125

Leu Val Leu Gln Ser Ile Leu Ser Leu Met Asp Arg Gly Ala Met Val

130 135 140

Leu Thr Thr Asn Tyr Asp Asn Leu Leu Glu Ala Phe Gly Arg Arg Gln

145 150 155 160

Asn Lys Pro Met Glu Ser Leu Asp Leu Lys Asp Lys Thr Lys Val Leu

165 170 175

Glu Trp Ala Arg Gly His Met Lys Tyr Gly Val Leu His Ile His Gly

180 185 190

Leu Tyr Thr Asp Pro Cys Gly Val Val Leu Asp Pro Ser Gly Tyr Lys  
195 200 205  
Asp Val Thr Gln Asp Ala Glu Val Met Glu Val Leu Gln Asn Leu Tyr  
210 215 220  
Arg Thr Lys Ser Phe Leu Phe Val Gly Cys Gly Glu Thr Leu His Asp  
225 230 235 240  
Gln Ile Phe Gln Ala Leu Phe Leu Tyr Ser Val Pro Asn Lys Val Asp  
245 250 255  
Leu Glu His Tyr Met Leu Val Leu Lys Glu Asn Glu Asp His Phe Phe  
260 265 270  
Lys His Gln Ala Asp Met Leu Leu His Gly Ile Lys Val Val Ser Tyr  
275 280 285  
Gly Asp Cys Phe Asp His Phe Pro Gly Tyr Val Gln Asp Leu Ala Thr  
290 295 300  
Gln Ile Cys Lys Gln Gln Ser Pro Asp Ala Asp Arg Val Asp Ser Thr  
305 310 315 320  
Thr Leu Leu Gly Asn Ala Cys Gln Asp Cys Ala Lys Arg Lys Leu Glu  
325 330 335  
Glu Asn Gly Ile Glu Val Ser Lys Lys Arg Thr Gln Ser Asp Thr Asp  
340 345 350  
Asp Ala Gly Gly Ser  
355

&lt;210&gt; 2809

&lt;211&gt; 501

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

Met	Gln	Glu	His	Lys	Leu	Lys	Val	Ala	Arg	Leu	Asp	Asn	Ile	Phe	Leu
1				5					10					15	
Thr	Arg	Met	His	Trp	Ser	Asn	Val	Gly	Gly	Leu	Ser	Gly	Met	Ile	Leu
				20					25					30	
Thr	Leu	Lys	Glu	Thr	Gly	Leu	Pro	Lys	Cys	Val	Leu	Ser	Gly	Pro	Pro
				35					40					45	
Gln	Leu	Glu	Lys	Tyr	Leu	Glu	Ala	Ile	Lys	Ile	Phe	Ser	Gly	Pro	Leu
				50					55					60	
Lys	Gly	Ile	Glu	Leu	Ala	Val	Arg	Pro	His	Ser	Ala	Pro	Glu	Tyr	Glu
				65					70					75	
Asp	Glu	Thr	Met	Thr	Val	Tyr	Gln	Ile	Pro	Ile	His	Ser	Glu	Gln	Arg
									85					90	
Arg	Gly	Lys	His	Gln	Pro	Trp	Gln	Ser	Pro	Glu	Arg	Pro	Leu	Ser	Arg
									100					105	
Leu	Ser	Pro	Glu	Arg	Ser	Ser	Asp	Ser	Glu	Ser	Asn	Glu	Asn	Glu	Pro
									115					120	
His	Leu	Pro	His	Gly	Val	Ser	Gln	Arg	Arg	Gly	Val	Arg	Asp	Ser	Ser
									130					135	
Leu	Val	Val	Ala	Phe	Ile	Cys	Lys	Leu	His	Leu	Lys	Arg	Gly	Asn	Phe
									145					150	
Leu	Val	Leu	Lys	Ala	Lys	Glu	Met	Gly	Leu	Pro	Val	Gly	Thr	Ala	Ala
									165					170	
Ile	Ala	Pro	Ile	Ile	Ala	Ala	Val	Lys	Asp	Gly	Lys	Ser	Ile	Thr	His
									180					185	
Glu	Gly	Arg	Glu	Ile	Leu	Ala	Glu	Glu	Leu	Cys	Thr	Pro	Pro	Asp	Pro
									195					200	
Gly	Ala	Ala	Phe	Val	Val	Val	Glu	Cys	Pro	Asp	Glu	Ser	Phe	Ile	Gln
									210					215	

Pro Ile Cys Glu Asn Ala Thr Phe Gln Arg Tyr Gln Gly Lys Ala Asp  
225 230 235 240  
Ala Pro Val Ala Leu Val Val His Met Ala Pro Ala Ser Val Leu Val  
245 250 255  
Asp Ser Arg Tyr Gln Gln Trp Met Glu Arg Phe Gly Pro Asp Thr Gln  
260 265 270  
His Leu Val Leu Asn Glu Asn Cys Ala Ser Val His Asn Leu Arg Ser  
275 280 285  
His Lys Ile Gln Thr Gln Leu Asn Leu Ile His Pro Asp Ile Phe Pro  
290 295 300  
Leu Leu Thr Ser Phe Arg Cys Lys Lys Glu Gly Pro Thr Leu Ser Val  
305 310 315 320  
Pro Met Val Gln Gly Glu Cys Leu Leu Lys Tyr Gln Leu Arg Pro Arg  
325 330 335  
Arg Glu Trp Gln Arg Asp Ala Ile Ile Thr Cys Asn Pro Glu Glu Phe  
340 345 350  
Ile Val Glu Ala Leu Gln Leu Pro Asn Phe Gln Gln Ser Val Gln Glu  
355 360 365  
Tyr Arg Arg Ser Ala Gln Asp Gly Pro Ala Pro Ala Glu Lys Arg Ser  
370 375 380  
Gln Tyr Pro Glu Ile Ile Phe Leu Gly Thr Gly Ser Ala Ile Pro Met  
385 390 395 400  
Lys Ile Arg Asn Val Ser Ala Thr Leu Val Asn Ile Ser Pro Asp Thr  
405 410 415  
Ser Leu Leu Leu Asp Cys Gly Glu Gly Thr Phe Gly Gln Leu Cys Arg  
420 425 430  
His Tyr Gly Asp Gln Val Asp Arg Val Leu Gly Thr Leu Ala Ala Val  
435 440 445  
Phe Val Ser His Leu His Ala Asp His His Thr Val Ser Val Gly Leu

450                      455                      460  
 Asp His Lys Ala Gly Ala Trp Arg Arg His Cys His Val Glu Leu Ala  
 465                      470                      475                      480  
 Leu Trp Leu Arg Leu Phe Leu Arg Phe Gln Thr Cys Pro Glu Leu Leu  
                     485                      490                      495  
 Leu Leu Ile Ser Gly  
                     500

<210> 2810

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2810

Met Thr Pro Arg Ser Arg Gly Pro Glu Val Glu Val Lys Arg Ala Glu  
     1                      5                      10                      15  
 Pro Arg Asp Ser Lys Ser Gln Ala Pro Gly Gln Pro Gly Ala Ser Gln  
                     20                      25                      30  
 Trp Gly Ser Arg Val Val Pro Asn Ala Ala Asn Gly Trp Ala Gly Gln  
                     35                      40                      45  
 Pro Pro Pro Thr Trp Gln Gln Gly Tyr Gly Pro Gln Gly Met Trp Val  
                     50                      55                      60  
 Pro Ala Gly Gln Ala Ile Gly Gly Tyr Gly Pro Pro Pro Ala Gly Arg  
     65                      70                      75                      80  
 Gly Ala Pro Pro Pro Pro Pro Pro Phe Thr Ser Tyr Ile Val Ser Thr  
                     85                      90                      95  
 Pro Pro Gly Gly Phe Pro Pro Pro Gln Gly Phe Pro Gln Gly Tyr Gly  
                     100                      105                      110



Ala Pro Pro Gln Phe Ser Phe Gly Tyr Gly Pro Pro Pro Pro Pro Pro  
 115 120 125  
 Asp Gln Phe Ala Pro Pro Gly Val Pro Pro Pro Pro Ala Thr Pro Gly  
 130 135 140  
 Ala Ala Pro Leu Ala Phe Pro Pro Pro Pro Ser Gln Ala Ala Pro Asp  
 145 150 155 160  
 Met Ser Lys Pro Pro Thr Ala Gln Pro Asp Phe Pro Tyr Gly Gln Tyr  
 165 170 175  
 Gly Tyr Gly Gln Asp Leu Ser Gly Phe Gly Gln Gly Val Ser Asp Pro  
 180 185 190  
 Ser Gln Gln Pro Pro Ser Tyr Gly Gly Pro Ser Val Pro Gly Ser Gly  
 195 200 205  
 Gly Pro Pro Ala Gly Gly Ser Gly Phe Gly Arg Gly Gln Asn His Asn  
 210 215 220  
 Val Gln Gly Phe His Pro Tyr Arg Arg  
 225 230

<210> 2811

<211> 443

<212> PRT

<213> Homo sapiens

<400> 2811

Met Ile Ala Gly Ala Lys Glu Lys Met Arg Ser Asp Leu Leu Leu Glu  
 1 5 10 15  
 Gly Phe Asn Asn Tyr Thr Phe Leu Ser Asn Gly Phe Val Pro Ile Pro  
 20 25 30  
 Ala Ala Gln Asp Asp Glu Met Phe Gln Glu Thr Val Glu Ala Met Ala

35	40	45
Ile Met Gly Phe Ser Glu Glu Glu Gln Leu Ser Ile Leu Lys Val Val		
50	55	60
Ser Ser Val Leu Gln Leu Gly Asn Ile Val Phe Lys Lys Glu Arg Asn		
65	70	75
Thr Asp Gln Ala Ser Met Pro Asp Asn Thr Ala Ala Gln Lys Val Cys		
85	90	95
His Leu Met Gly Ile Asn Val Thr Asp Phe Thr Arg Ser Ile Leu Thr		
100	105	110
Pro Arg Ile Lys Val Gly Arg Asp Val Val Gln Lys Ala Gln Thr Lys		
115	120	125
Glu Gln Ala Asp Phe Ala Val Glu Ala Leu Ala Lys Ala Thr Tyr Glu		
130	135	140
Arg Leu Phe Arg Trp Ile Leu Thr Arg Val Asn Lys Ala Leu Asp Lys		
145	150	155
Thr His Arg Gln Gly Ala Ser Phe Leu Gly Ile Leu Asp Ile Ala Gly		
165	170	175
Phe Glu Ile Phe Glu Val Asn Ser Phe Glu Gln Leu Cys Ile Asn Tyr		
180	185	190
Thr Asn Glu Lys Leu Gln Gln Leu Phe Asn His Thr Met Phe Ile Leu		
195	200	205
Glu Gln Glu Glu Tyr Gln Arg Glu Gly Ile Glu Trp Asn Phe Ile Asp		
210	215	220
Phe Gly Leu Asp Leu Gln Pro Cys Ile Glu Leu Ile Glu Arg Pro Asn		
225	230	235
Asn Pro Pro Gly Val Leu Ala Leu Leu Asp Glu Glu Cys Trp Phe Pro		
245	250	255
Lys Ala Thr Asp Lys Ser Phe Val Glu Lys Leu Cys Thr Glu Gln Gly		
260	265	270

Ser His Pro Lys Phe Gln Lys Pro Lys Gln Leu Lys Asp Lys Thr Glu  
275 280 285  
Phe Ser Ile Ile His Tyr Ala Gly Lys Val Asp Tyr Asn Ala Ser Ala  
290 295 300  
Trp Leu Thr Lys Asn Met Asp Pro Leu Asn Asp Asn Val Thr Ser Leu  
305 310 315 320  
Leu Asn Ala Ser Ser Asp Lys Phe Val Ala Asp Leu Trp Lys Asp Val  
325 330 335  
Asp Arg Ile Val Gly Leu Asp Gln Met Ala Lys Met Thr Glu Ser Ser  
340 345 350  
Leu Pro Ser Ala Ser Lys Thr Lys Lys Gly Met Phe Arg Thr Val Gly  
355 360 365  
Gln Leu Tyr Lys Glu Gln Leu Gly Lys Leu Met Thr Thr Leu Arg Asn  
370 375 380  
Thr Thr Pro Asn Phe Val Arg Cys Ile Ile Pro Asn His Glu Lys Arg  
385 390 395 400  
Val Arg Pro Ala Ala Gln Thr Leu Gly Leu Pro Glu Ala Arg Ala Val  
405 410 415  
Pro Ser Gly His Ser Val Pro Arg Ala Pro Ser Ala Pro Thr Tyr Pro  
420 425 430  
Glu Asp Pro Ile Phe His Val Gly Lys Ala Ile  
435 440

&lt;210&gt; 2812

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Trp Ala Leu Thr Gly Leu Asp Gly Lys Leu Pro Ser Cys His  
 1 5 10 15  
 Phe Leu Ala Val Gly Leu Gln Val Gly Pro Ser Thr Ser Leu Cys Leu  
 20 25 30  
 Ser Cys Leu Thr Asp Lys Ile Glu Ile Thr Thr Val Pro Thr Trp Asp  
 35 40 45  
 Asp Phe Phe Ser Phe Leu Phe Phe Trp Phe Leu Phe Leu Leu Phe Phe  
 50 55 60  
 Ile Phe Leu Arg Trp Ser Leu Thr Leu Val Ala Gln Ala Gly Val Gln  
 65 70 75 80  
 Trp Leu Asp Ile Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Gln  
 85 90 95  
 Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg His Pro Pro  
 100 105 110  
 Pro Cys Pro Ala Ser Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro  
 115 120 125  
 Tyr Trp Pro Gly Trp Ser  
 130

&lt;210&gt; 2813

&lt;211&gt; 1253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

Met Ile Lys Glu Ala Arg Arg Thr Ala Glu Gln Ala Ser Lys Pro Lys  
 1 5 10 15

Val Pro Pro Lys Ser Glu Lys Glu Asn Asp Pro Leu Arg Thr Pro Glu  
20 25 30  
Ala Leu Pro Glu Glu Lys Lys Ile Glu Tyr Arg Leu Leu Lys Glu Glu  
35 40 45  
Ile Ala Asn Arg Glu Lys Gln Arg Leu Ile Lys Ser Asp Gln Leu Lys  
50 55 60  
Thr Ser Ser Ser Ser Pro Ala Asn Ser Asp Val Glu Ile Asp Gly Ile  
65 70 75 80  
Gly Arg Ile Ala Met Val Thr Lys Gln Val Thr Asp Ala Glu Ser Lys  
85 90 95  
Leu Lys Lys His Arg Ile Leu Leu Met Lys Asp Glu Ser Val Leu Lys  
100 105 110  
Asn Leu Val Gln Gln Glu Ala Lys Lys Lys Glu Ser Val Arg Asn Ala  
115 120 125  
Glu Ala Lys Ile Thr Lys Leu Thr Glu Gln Leu Gln Ala Thr Glu Lys  
130 135 140  
Ile Leu Asn Val Asn Arg Met Phe Leu Lys Lys Leu Gln Glu Gln Ile  
145 150 155 160  
His Arg Val Gln Gln Arg Val Thr Ile Lys Lys Ala Leu Thr Leu Lys  
165 170 175  
Tyr Gly Glu Glu Leu Ala Arg Ala Lys Ala Val Ala Ser Lys Glu Ile  
180 185 190  
Gly Lys Arg Lys Leu Glu Gln Asp Arg Phe Gly Pro Asn Lys Met Met  
195 200 205  
Arg Leu Asp Ser Ser Pro Val Ser Ser Pro Arg Lys His Ser Ala Glu  
210 215 220  
Leu Ile Ala Met Glu Lys Arg Arg Leu Gln Lys Leu Glu Tyr Glu Tyr  
225 230 235 240  
Ala Leu Lys Ile Gln Lys Leu Lys Glu Ala Arg Ala Leu Lys Ala Lys

245	250	255
Glu Gln Gln Asn Ile Ser Pro Val Val Glu Glu Glu Pro Glu Phe Ser		
260	265	270
Leu Pro Gln Pro Ser Leu His Asp Leu Thr Gln Asp Lys Leu Thr Leu		
275	280	285
Asp Thr Glu Glu Asn Asp Val Asp Asp Glu Ile Leu Ser Gly Ser Ser		
290	295	300
Arg Glu Arg Arg Arg Ser Phe Leu Glu Ser Asn Tyr Phe Thr Lys Pro		
305	310	315
320		
Asn Leu Lys His Thr Asp Thr Ala Asn Lys Glu Cys Ile Asn Lys Leu		
325	330	335
Asn Lys Asn Thr Val Glu Lys Pro Glu Leu Phe Leu Gly Leu Lys Ile		
340	345	350
Gly Glu Leu Gln Lys Leu Tyr Ser Lys Ala Asp Ser Leu Lys Gln Leu		
355	360	365
Ile Leu Lys Thr Thr Thr Gly Ile Thr Glu Lys Val Leu His Gly Gln		
370	375	380
Glu Ile Ser Val Asp Val Asp Phe Val Thr Ala Gln Ser Lys Thr Met		
385	390	395
400		
Glu Val Lys Pro Cys Pro Phe Arg Pro Tyr His Ser Pro Leu Leu Val		
405	410	415
Phe Lys Ser Tyr Arg Phe Ser Pro Tyr Tyr Arg Thr Lys Glu Lys Leu		
420	425	430
Pro Leu Ser Ser Val Ser Tyr Ser Asn Met Ile Glu Pro Asp Gln Cys		
435	440	445
Phe Cys Arg Phe Asp Leu Thr Gly Thr Cys Asn Asp Asp Asp Cys Gln		
450	455	460
Trp Gln His Ile Gln Asp Tyr Thr Leu Ser Arg Lys Gln Leu Phe Gln		
465	470	475
480		

Asp Ile Leu Ser Tyr Asn Leu Ser Leu Ile Gly Cys Ala Glu Thr Ser			
	485	490	495
Thr Asn Glu Glu Ile Thr Ala Ser Ala Glu Lys Tyr Val Glu Lys Leu			
	500	505	510
Phe Gly Val Asn Lys Asp Arg Met Ser Met Asp Gln Met Ala Val Leu			
	515	520	525
Leu Val Ser Asn Ile Asn Glu Ser Lys Gly His Thr Pro Pro Phe Thr			
	530	535	540
Thr Tyr Lys Asp Lys Arg Lys Trp Lys Pro Lys Phe Trp Arg Lys Pro			
545	550	555	560
Ile Ser Asp Asn Ser Phe Ser Ser Asp Glu Glu Gln Ser Thr Gly Pro			
	565	570	575
Ile Lys Tyr Ala Phe Gln Pro Glu Asn Gln Ile Asn Val Pro Ala Leu			
	580	585	590
Asp Thr Val Val Thr Pro Asp Asp Val Arg Tyr Phe Thr Asn Glu Thr			
	595	600	605
Asp Asp Ile Ala Asn Leu Glu Ala Ser Val Leu Glu Asn Pro Ser His			
	610	615	620
Val Gln Leu Trp Leu Lys Leu Ala Tyr Lys Tyr Leu Asn Gln Asn Glu			
625	630	635	640
Gly Glu Cys Ser Glu Ser Leu Asp Ser Ala Leu Asn Val Leu Ala Arg			
	645	650	655
Ala Leu Glu Asn Asn Lys Asp Asn Pro Glu Ile Trp Cys His Tyr Leu			
	660	665	670
Arg Leu Phe Ser Lys Arg Gly Thr Lys Asp Glu Val Gln Glu Met Cys			
	675	680	685
Glu Thr Ala Val Glu Tyr Ala Pro Asp Tyr Gln Ser Phe Trp Thr Phe			
	690	695	700
Leu His Leu Glu Ser Thr Phe Glu Glu Lys Asp Tyr Val Cys Glu Arg			

705                      710                      715                      720  
Met Leu Glu Phe Leu Met Gly Ala Ala Lys Gln Glu Thr Ser Asn Ile  
                         725                      730                      735  
Leu Ser Phe Gln Leu Leu Glu Ala Leu Leu Phe Arg Val Gln Leu His  
                         740                      745                      750  
Ile Phe Thr Gly Arg Cys Gln Ser Ala Leu Ala Ile Leu Gln Asn Ala  
                         755                      760                      765  
Leu Lys Ser Ala Asn Asp Gly Ile Val Ala Glu Tyr Leu Lys Thr Ser  
                         770                      775                      780  
Asp Arg Cys Leu Ala Trp Leu Ala Tyr Ile His Leu Ile Glu Phe Asn  
785                      790                      795                      800  
Ile Leu Pro Ser Lys Phe Tyr Asp Pro Ser Asn Asp Asn Pro Ser Arg  
                         805                      810                      815  
Ile Val Asn Thr Glu Ser Phe Val Met Pro Trp Gln Ala Val Gln Asp  
                         820                      825                      830  
Val Lys Thr Asn Pro Asp Met Leu Leu Ala Val Phe Glu Asp Ala Val  
                         835                      840                      845  
Lys Ala Cys Thr Asp Glu Ser Leu Ala Val Glu Glu Arg Ile Glu Ala  
                         850                      855                      860  
Cys Leu Pro Leu Tyr Thr Asn Met Ile Ala Leu His Gln Leu Leu Glu  
865                      870                      875                      880  
Arg Tyr Glu Ala Ala Met Glu Leu Cys Lys Ser Leu Leu Glu Ser Cys  
                         885                      890                      895  
Pro Ile Asn Cys Gln Leu Leu Glu Ala Leu Val Ala Leu Tyr Leu Gln  
                         900                      905                      910  
Thr Asn Gln His Asp Lys Ala Arg Ala Val Trp Leu Thr Ala Phe Glu  
                         915                      920                      925  
Lys Asn Pro Gln Asn Ala Glu Val Phe Tyr His Met Cys Lys Phe Phe  
                         930                      935                      940



Ile Leu Gln Asn Arg Gly Asp Asn Leu Leu Pro Phe Leu Arg Lys Phe  
945 950 955 960  
Ile Ala Ser Phe Phe Lys Pro Gly Phe Glu Lys Tyr Asn Asn Leu Asp  
965 970 975  
Leu Phe Arg Tyr Leu Leu Asn Ile Pro Gly Pro Ile Asp Ile Pro Ser  
980 985 990  
Arg Leu Cys Lys Gly Asn Phe Asp Asp Asp Met Phe Asn His Gln Val  
995 1000 1005  
Pro Tyr Leu Trp Leu Ile Tyr Cys Leu Cys His Pro Leu Gln Ser Ser  
1010 1015 1020  
Ile Lys Glu Thr Val Glu Ala Tyr Glu Ala Ala Leu Gly Val Ala Met  
1025 1030 1035 1040  
Arg Cys Asp Ile Val Gln Lys Ile Trp Met Asp Tyr Leu Val Phe Ala  
1045 1050 1055  
Asn Asn Arg Ala Ala Gly Ser Arg Asn Lys Val Gln Glu Phe Lys Phe  
1060 1065 1070  
Phe Thr Asp Leu Val Asn Arg Cys Leu Val Thr Val Pro Ala Arg Tyr  
1075 1080 1085  
Pro Ile Pro Phe Ser Ser Ala Asp Tyr Trp Ser Asn Tyr Glu Phe His  
1090 1095 1100  
Asn Arg Val Ile Phe Phe Tyr Leu Ser Cys Val Pro Lys Thr Gln His  
1105 1110 1115 1120  
Ser Lys Thr Leu Glu Arg Phe Cys Ser Val Met Pro Ala Asn Ser Gly  
1125 1130 1135  
Leu Ala Leu Arg Leu Leu Gln His Glu Trp Glu Glu Ser Asn Val Gln  
1140 1145 1150  
Ile Leu Lys Leu Gln Ala Lys Met Phe Thr Tyr Asn Ile Pro Thr Cys  
1155 1160 1165  
Leu Ala Thr Trp Lys Ile Ala Ile Ala Ala Glu Ile Val Leu Lys Gly

1170                      1175                      1180  
 Gln Arg Glu Val His Arg Leu Tyr Gln Arg Ala Leu Gln Lys Leu Pro  
 1185                      1190                      1195                      1200  
 Leu Cys Ala Ser Leu Trp Lys Asp Gln Leu Leu Phe Glu Ala Ser Glu  
                          1205                      1210                      1215  
 Gly Gly Lys Thr Asp Asn Leu Arg Lys Leu Val Ser Lys Cys Gln Glu  
                          1220                      1225                      1230  
 Ile Gly Val Ser Leu Asn Glu Leu Leu Asn Leu Asn Ser Asn Lys Thr  
                          1235                      1240                      1245  
 Glu Ser Lys Asn His  
                          1250

<210> 2814

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2814

Met Arg Gly His Trp Lys Val Thr Glu Ile Leu Arg Ile Thr Ile Leu  
     1                      5                      10                      15  
 Leu Leu Gly Lys Pro Gly Gly Gly Trp Ala His Ser Trp Gly Ala Tyr  
                          20                      25                      30  
 Glu Ser Gly Pro Gly Glu Gly Val Arg Ala Pro Trp Lys Ile Leu Arg  
                          35                      40                      45  
 Asp Ala Gly Ile Leu Leu Gly Phe Phe Trp Glu Ala Glu Asp Val Ser  
                          50                      55                      60  
 Asp Ile Ala Arg Ile Leu Met Glu Ile Arg Gly Pro Gly Asp Arg Asn  
                          65                      70                      75                      80

Pro Gly Asp Ser Glu Ser Leu Leu Gly Lys Phe Leu Gly Gly Arg Ser  
                             85                            90                            95  
 Ser Ser Thr Ser Gly His Ser Trp Leu Pro Val Trp Lys His Leu Pro  
                             100                            105                            110  
 Arg Arg Gly Gly Tyr Gly Asn Ile Arg Lys Ser Arg Val Asn Lys Asn  
                             115                            120                            125  
 Arg Arg Thr Asp Arg Gly Lys Ala Glu Ala Arg  
                             130                            135

<210> 2815

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2815

Met Gly Arg Val Val Ser Asp Gly Glu Leu Gly Phe Val Gly Arg Val  
           1                            5                            10                            15  
 Val Ser Asp Gly Glu Leu Gly Phe Val Gly Arg Val Val Ser Asp Gly  
                             20                            25                            30  
 Glu Leu Gly Phe Val Gly Arg Val Val Ser Asp Gly Glu Leu Gly Phe  
                             35                            40                            45  
 Val Ser Arg Val Val Ser Asp Ala Glu Leu Gly Phe Val Gly Arg Val  
           50                            55                            60  
 Val Ser Asp Gly Glu Leu Glu Phe Val Gly Arg Val Val Ser Asp Ala  
           65                            70                            75                            80  
 Glu Leu Gly Phe Val Gly Arg Val Val Ser Asp Gly Glu Leu Gly Phe  
                             85                            90                            95  
 Val Gly Arg Val Val Ser Asp Ala Glu Leu Gly Phe Met Gly Arg Val

100 105 110  
Val Ser Asp Gly Glu Leu Gly Phe Val Gly Arg Val Val Gly Cys Pro  
115 120 125  
Thr Val Ser Leu Phe  
130

&lt;210&gt; 2816

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2816

Met Glu Gly Asp Cys Leu Lys Val Val Cys Ser Ser Gln Leu Ser Phe  
1 5 10 15  
Phe Leu Val Thr Ser Pro Ser Ile Pro Leu Gly Arg Gly Arg Gly Gly  
20 25 30  
Val Gly Leu Ile Ala Phe Asn Leu Asp Ser Cys Thr Ile Pro His Gly  
35 40 45  
Ser Leu Leu Gln Thr Phe Ala Lys Asn Pro Ser Pro His Glu Gln Asn  
50 55 60  
Phe Ser Ala Cys Ser Leu Cys Ser Ser Lys Val Leu Leu Gly Asn Arg  
65 70 75 80  
Gln Phe Cys Arg His Phe His Cys Lys Gln Asn Pro Ser Glu Glu Met  
85 90 95  
Val Ala Ser Val Gln Asp Thr Asn Gln His Gly Asn Leu His Tyr Arg  
100 105 110  
Met Arg Thr Val Phe Pro Leu Pro Gln Val Gly His Arg Pro Pro  
115 120 125

&lt;210&gt; 2817

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

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Met Thr Cys Ser Val Thr His Ile Val Ser Phe Ser Leu Pro Phe Leu
  1           5           10           15
Asn Pro Ser His Pro Ala Ser Thr Pro Gly His Thr Glu Asn Glu Gln
      20           25           30
Pro Ser Leu Val Trp Phe Asp Arg Gly Lys Phe Tyr Leu Thr Phe Glu
      35           40           45
Gly Ser Ser Arg Gly Pro Ser Pro Leu Thr Met Gly Ala Gln Asp Thr
      50           55           60
Leu Pro Val Ala Ala Ala Phe Thr Glu Thr Val Asn Ala Tyr Phe Lys
      65           70           75           80
Gly Ala Asp Pro Ser Lys Cys Ile Val Lys Ile Thr Gly Glu Met Val
      85           90           95
Leu Ser Phe Pro Ala Gly Ile Thr Arg His Phe Ala Asn Asn Pro Ser
      100          105          110
Pro Ala Ala Leu Thr Phe Arg Val Ile Asn Phe Ser Arg Leu Glu His
      115          120          125
Val Leu Pro Asn Pro Gln Leu Leu Cys Cys Asp Asn Thr Gln Asn Asp
      130          135          140
Ala Asn Thr Lys Glu Phe Trp Val Asn Met Pro Asn Leu Met Thr His
      145          150          155          160
Leu Lys Lys Val Ser Glu Gln Lys Pro Gln Ala Thr Tyr Tyr Asn Val

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165 170 175  
Asp Met Leu Lys Tyr Gln Val Ser Ala Gln Gly Ile Gln Ser Thr Pro  
180 185 190  
Leu Asn Leu Ala Val Asn Trp Arg Cys Glu Pro Ser Ser Thr Asp Leu  
195 200 205  
Arg Ile Asp Tyr Lys Tyr Asn Thr Asp Ala Met Thr Thr Ala Val Ala  
210 215 220  
Leu Asn Asn Val Gln Phe Leu Val Pro Ile Asp Gly Gly Val Thr Lys  
225 230 235 240  
Leu Gln Ala Val Leu Pro Pro Ala Val Trp Asn Ala Glu Gln Gln Arg  
245 250 255  
Ile Leu Trp Lys Ile Pro Asp Ile Ser Gln Lys Ser Glu Asn Gly Gly  
260 265 270  
Val Gly Ser Leu Leu Ala Arg Phe Gln Leu Ser Glu Gly Pro Ser Lys  
275 280 285  
Pro Ser Pro Leu Val Val Gln Phe Thr Ser Glu Gly Ser Thr Leu Ser  
290 295 300  
Gly Cys Asp Ile Glu Leu Val Gly Ala Gly Tyr Arg Phe Ser Leu Ile  
305 310 315 320  
Lys Lys Arg Phe Ala Ala Gly Lys Tyr Leu Ala Asp Asn  
325 330

&lt;210&gt; 2818

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2818

Met Thr Gly Lys Gln Ile Phe Gly Asn Ile Lys Glu Ala Ile Tyr Pro  
 1 5 10 15  
 Leu Ala Leu Asn Trp Trp Arg Arg Arg Lys Ala Arg Thr Asn Ser Glu  
 20 25 30  
 Lys Leu Tyr Ser Arg Trp Glu Gln Asp His Asp Leu Glu Ser Phe Gly  
 35 40 45  
 Pro Leu Gly Leu Phe Tyr Glu Tyr Leu Glu Thr Val Thr Gln Phe Gly  
 50 55 60  
 Phe Val Thr Leu Phe Val Ala Ser Phe Pro Leu Ala Pro Leu Leu Ala  
 65 70 75 80  
 Leu Ile Asn Asn Ile Val Glu Ile Arg Val Asp Ala Trp Lys Leu Thr  
 85 90 95  
 Thr Gln Tyr Arg Arg Thr Val Ala Ser Lys Ala His Ser Ile Gly Val  
 100 105 110  
 Trp Gln Asp Ile Leu Tyr Gly Met Ala Val Leu Ser Val Ala Thr Asn  
 115 120 125  
 Ala Phe Ile Val Ala Phe Thr Ser Asp Ile Ile Pro Arg Leu Val Tyr  
 130 135 140  
 Tyr Tyr Ala Tyr Ser Thr Asn Ala Thr Gln Pro Met Thr Gly Tyr Val  
 145 150 155 160  
 Asn Asn Ser Leu Ser Val Phe Leu Ile Ala Asp Phe Pro Asn His Thr  
 165 170 175  
 Ala Pro Ser Glu Lys Arg Asp Phe Ile Thr Cys Arg Tyr Arg Asp Tyr  
 180 185 190  
 Arg Tyr Pro Pro Asp Asp Glu Asn Lys Tyr Phe His Asn Met Gln Phe  
 195 200 205  
 Trp His Val Leu Ala Ala Lys Met Thr Phe Ile Ile Val Met Glu His  
 210 215 220  
 Val Val Phe Leu Val Lys Phe Leu Leu Ala Trp Met Ile Pro Asp Val

225                      230                      235                      240  
 Pro Lys Asp Val Val Glu Arg Ile Lys Arg Glu Lys Leu Met Thr Ile  
                          245                      250                      255  
 Lys Ile Leu His Asp Phe Glu Leu Asn Lys Leu Lys Glu Asn Leu Gly  
                          260                      265                      270  
 Ile Asn Ser Asn Glu Phe Ala Lys His Val Met Ile Glu Glu Asn Lys  
                          275                      280                      285  
 Ala Gln Leu Ala Lys Ser Thr Leu  
                          290                      295

<210> 2819

<211> 215

<212> PRT

<213> Homo sapiens

<400> 2819

Met Asp Glu Leu Pro Ala Ala Phe Val Asp Gly Ser Lys Asn Gly Gly  
   1                      5                      10                      15  
 Asp Lys His Gly Ala Asn Ser Leu Lys Ile Thr Glu Lys Val Ser Gly  
                          20                      25                      30  
 Gln His Val Glu Ile Gln Ala Lys Tyr Ile Gly Thr Thr Ile Val Val  
                          35                      40                      45  
 Arg Gln Val Gly Arg Tyr Leu Thr Phe Ala Val Arg Met Pro Glu Glu  
                          50                      55                      60  
 Val Val Asn Ala Val Glu Asp Trp Asp Ser Gln Gly Leu Tyr Leu Cys  
                          65                      70                      75                      80  
 Leu Arg Gly Cys Pro Leu Asn Gln Gln Ile Asp Phe Gln Ala Phe His  
                          85                      90                      95



Thr Asn Ala Glu Gly Thr Gly Ala Arg Arg Leu Ala Ala Ala Ser Pro  
 100 105 110  
 Ala Pro Thr Ala Pro Glu Thr Phe Pro Tyr Glu Thr Ala Val Ala Lys  
 115 120 125  
 Cys Lys Glu Lys Leu Pro Val Glu Asp Leu Tyr Tyr Gln Ala Cys Val  
 130 135 140  
 Phe Asp Leu Leu Thr Thr Gly Asp Val Asn Phe Thr Leu Ala Ala Tyr  
 145 150 155 160  
 Tyr Ala Leu Glu Asp Val Lys Met Leu His Ser Asn Lys Asp Lys Leu  
 165 170 175  
 His Leu Tyr Glu Arg Thr Arg Asp Leu Pro Gly Arg Ala Ala Ala Gly  
 180 185 190  
 Leu Pro Leu Ala Pro Arg Pro Leu Leu Gly Ala Leu Val Pro Leu Leu  
 195 200 205  
 Ala Leu Leu Pro Val Phe Cys  
 210 215

<210> 2820

<211> 1520

<212> PRT

<213> Homo sapiens

<400> 2820

Met Tyr Gly Glu Asp Pro Ser Asn Ala Met Pro Val Ile Phe Gly Lys  
 1 5 10 15  
 Ser Ser Cys Ser Glu Phe Ser Lys Glu Ala Tyr Thr Ala Val Val Tyr  
 20 25 30  
 His Asn Arg Ser Pro Asp Phe His Glu Glu Ile Lys Val Lys Leu Pro

35	40	45
Ala Thr Leu Thr Asp His His His Leu Leu Phe Thr Phe Tyr His Val		
50	55	60
Ser Cys Gln Gln Lys Gln Asn Thr Pro Leu Glu Thr Pro Val Gly Tyr		
65	70	75
Thr Trp Ile Pro Met Leu Gln Asn Gly Arg Leu Lys Thr Gly Gln Phe		
85	90	95
Cys Leu Pro Val Ser Leu Glu Lys Pro Pro Gln Ala Tyr Ser Val Leu		
100	105	110
Ser Pro Glu Val Pro Leu Pro Gly Met Lys Trp Val Asp Asn His Lys		
115	120	125
Gly Val Phe Asn Val Glu Val Val Ala Val Ser Ser Ile His Thr Gln		
130	135	140
Asp Pro Tyr Leu Asp Lys Phe Phe Ala Leu Val Asn Ala Leu Asp Glu		
145	150	155
Arg Leu Phe Pro Val Arg Ile Gly Asp Met Arg Ile Met Glu Asn Asn		
165	170	175
Leu Glu Asn Glu Leu Lys Ser Ser Ile Ser Ala Leu Asn Ser Ser Gln		
180	185	190
Leu Glu Pro Val Val Arg Phe Leu His Leu Leu Leu Asp Lys Leu Ile		
195	200	205
Leu Leu Val Ile Arg Pro Pro Val Ile Ala Gly Gln Ile Val Asn Leu		
210	215	220
Gly Gln Ala Ser Phe Glu Ala Met Ala Ser Ile Ile Asn Arg Leu His		
225	230	235
Lys Asn Leu Glu Gly Asn His Asp Gln His Gly Arg Asn Ser Leu Leu		
245	250	255
Ala Ser Tyr Ile His Tyr Val Phe Arg Leu Pro Asn Thr Tyr Pro Asn		
260	265	270

Ser Ser Ser Pro Gly Pro Gly Gly Leu Gly Gly Ser Val His Tyr Ala  
275 280 285

Thr Met Ala Arg Ser Ala Val Arg Pro Ala Ser Leu Asn Leu Asn Arg  
290 295 300

Ser Arg Ser Leu Ser Asn Ser Asn Pro Asp Ile Ser Gly Thr Pro Thr  
305 310 315 320

Ser Pro Asp Asp Glu Val Arg Ser Ile Ile Gly Ser Lys Ala Met Asp  
325 330 335

Arg Ser Cys Asn Arg Met Ser Ser His Thr Glu Thr Ser Ser Phe Leu  
340 345 350

Gln Thr Leu Thr Gly Arg Leu Pro Thr Lys Lys Leu Phe His Glu Glu  
355 360 365

Leu Ala Leu Gln Trp Val Val Cys Ser Gly Ser Val Arg Glu Ser Ala  
370 375 380

Leu Gln Gln Ala Trp Phe Phe Phe Glu Leu Met Val Lys Ser Met Val  
385 390 395 400

His His Leu Tyr Phe Asn Asp Lys Leu Glu Ala Pro Arg Lys Ser Arg  
405 410 415

Phe Pro Glu Arg Phe Met Asp Asp Ile Ala Ala Leu Val Ser Thr Ile  
420 425 430

Ala Ser Asp Ile Val Ser Arg Phe Gln Lys Asp Thr Glu Met Val Glu  
435 440 445

Arg Leu Asn Thr Ser Leu Ala Phe Phe Leu Asn Asp Leu Leu Ser Val  
450 455 460

Met Asp Arg Gly Phe Val Phe Ser Leu Ile Lys Ser Cys Tyr Lys Gln  
465 470 475 480

Val Ser Ser Lys Leu Tyr Ser Leu Pro Asn Pro Ser Val Leu Val Ser  
485 490 495

Leu Arg Leu Asp Phe Leu Arg Ile Ile Cys Ser His Glu His Tyr Val

500 505 510  
Thr Leu Asn Leu Pro Cys Ser Leu Leu Thr Pro Pro Ala Ser Pro Ser  
515 520 525  
Pro Ser Val Ser Ser Ala Thr Ser Gln Ser Ser Gly Phe Ser Thr Asn  
530 535 540  
Val Gln Asp Gln Lys Ile Ala Asn Met Phe Glu Leu Ser Val Pro Phe  
545 550 555 560  
Arg Gln Gln His Tyr Leu Ala Gly Leu Val Leu Thr Glu Leu Ala Val  
565 570 575  
Ile Leu Asp Pro Asp Ala Glu Gly Leu Phe Gly Leu His Lys Lys Val  
580 585 590  
Ile Asn Met Val His Asn Leu Leu Ser Ser His Asp Ser Asp Pro Arg  
595 600 605  
Tyr Ser Asp Pro Gln Ile Lys Ala Arg Val Ala Met Leu Tyr Leu Pro  
610 615 620  
Leu Ile Gly Ile Ile Met Glu Thr Val Pro Gln Leu Tyr Asp Phe Thr  
625 630 635 640  
Glu Thr His Asn Gln Arg Gly Arg Pro Ile Cys Ile Ala Thr Asp Asp  
645 650 655  
Tyr Glu Ser Glu Ser Gly Ser Met Ile Ser Gln Thr Val Ala Met Ala  
660 665 670  
Ile Ala Gly Thr Ser Val Pro Gln Leu Thr Arg Pro Gly Ser Phe Leu  
675 680 685  
Leu Thr Ser Thr Ser Gly Arg Gln His Thr Thr Phe Ser Ala Glu Ser  
690 695 700  
Ser Arg Ser Leu Leu Ile Cys Leu Leu Trp Val Leu Lys Asn Ala Asp  
705 710 715 720  
Glu Thr Val Leu Gln Lys Trp Phe Thr Asp Leu Ser Val Leu Gln Leu  
725 730 735

Asn Arg Leu Leu Asp Leu Leu Tyr Leu Cys Val Ser Cys Phe Glu Tyr  
740 745 750  
Lys Gly Lys Lys Val Phe Glu Arg Met Asn Ser Leu Thr Phe Lys Lys  
755 760 765  
Ser Lys Asp Met Arg Ala Lys Leu Glu Glu Ala Ile Leu Gly Ser Ile  
770 775 780  
Gly Ala Arg Gln Glu Met Val Arg Arg Ser Arg Gly Gln Leu Gly Thr  
785 790 795 800  
Tyr Thr Ile Ala Ser Pro Pro Glu Arg Ser Pro Ser Gly Ser Ala Phe  
805 810 815  
Gly Ser Gln Gly Asn Leu Arg Trp Arg Lys Asp Met Thr His Trp Arg  
820 825 830  
Gln Asn Thr Glu Lys Leu Asp Lys Ser Arg Ala Glu Ile Glu His Glu  
835 840 845  
Ala Leu Ile Asp Gly Asn Leu Ala Thr Glu Ala Asn Leu Ile Ile Leu  
850 855 860  
Asp Thr Leu Glu Ile Val Val Gln Thr Val Ser Val Thr Glu Ser Lys  
865 870 875 880  
Glu Ser Ile Leu Gly Gly Val Leu Lys Val Leu Leu His Ser Met Ala  
885 890 895  
Cys Asn Gln Ser Val Val Tyr Leu Gln His Cys Phe Ala Thr Gln Arg  
900 905 910  
Ala Leu Val Ser Lys Phe Pro Glu Leu Leu Phe Glu Glu Glu Thr Glu  
915 920 925  
Gln Cys Ala Asp Leu Cys Leu Arg Leu Leu Arg His Cys Ser Ser Ser  
930 935 940  
Ile Gly Thr Ile Arg Ser His Ala Ser Ala Ser Leu Tyr Leu Leu Met  
945 950 955 960  
Arg Gln Asn Phe Glu Ile Gly Asn Asn Phe Ala Arg Val Lys Met Gln

965	970	975
Val Thr Met Ser Leu Ser Ser Leu Val Gly Thr Ser Gln Asn Phe Asn		
980	985	990
Glu Glu Phe Leu Arg Arg Ser Leu Lys Thr Ile Leu Thr Tyr Ala Glu		
995	1000	1005
Glu Asp Leu Glu Leu Arg Glu Thr Thr Phe Leu Asp Gln Val Gln Asp		
1010	1015	1020
Leu Val Phe Asn Leu His Met Ile Leu Ser Asp Thr Val Lys Met Lys		
1025	1030	1035
1040		
Glu His Gln Glu Asp Pro Glu Met Leu Ile Asp Leu Met Tyr Arg Ile		
1045	1050	1055
Ala Lys Gly Tyr Gln Thr Ser Pro Asp Leu Arg Leu Thr Trp Leu Gln		
1060	1065	1070
Asn Met Ala Gly Lys His Ser Glu Arg Ser Asn His Ala Glu Ala Ala		
1075	1080	1085
Gln Cys Leu Val His Ser Ala Ala Leu Val Ala Glu Tyr Leu Ser Met		
1090	1095	1100
Leu Glu Asp Arg Lys Tyr Leu Pro Val Gly Cys Val Thr Phe Gln Asn		
1105	1110	1115
1120		
Ile Ser Ser Asn Val Leu Glu Glu Ser Ala Val Ser Asp Asp Val Val		
1125	1130	1135
Ser Pro Asp Glu Glu Gly Ile Cys Ser Gly Lys Tyr Phe Thr Glu Ser		
1140	1145	1150
Gly Leu Val Gly Leu Leu Glu Gln Ala Ala Ala Ser Phe Ser Met Ala		
1155	1160	1165
Gly Met Tyr Glu Ala Val Asn Glu Val Tyr Lys Val Leu Ile Pro Ile		
1170	1175	1180
His Glu Ala Asn Arg Asp Ala Lys Lys Leu Ser Thr Ile His Gly Lys		
1185	1190	1195
1200		

Leu Gln Glu Ala Phe Ser Lys Ile Val His Gln Ser Thr Gly Trp Glu			
1205	1210	1215	
Arg Met Phe Gly Thr Tyr Phe Arg Val Gly Phe Tyr Gly Thr Lys Phe			
1220	1225	1230	
Gly Asp Leu Asp Glu Gln Glu Phe Val Tyr Lys Glu Pro Ala Ile Thr			
1235	1240	1245	
Lys Leu Ala Glu Ile Ser His Arg Leu Glu Gly Phe Tyr Gly Glu Arg			
1250	1255	1260	
Phe Gly Glu Asp Val Val Glu Val Ile Lys Asp Ser Asn Pro Val Asp			
1265	1270	1275	1280
Lys Cys Lys Leu Asp Pro Asn Lys Ala Tyr Ile Gln Ile Thr Tyr Val			
1285	1290	1295	
Glu Pro Tyr Phe Asp Thr Tyr Glu Met Lys Asp Arg Ile Thr Tyr Phe			
1300	1305	1310	
Asp Lys Asn Tyr Asn Leu Arg Arg Phe Met Tyr Cys Thr Pro Phe Thr			
1315	1320	1325	
Leu Asp Gly Arg Ala His Gly Glu Leu His Glu Gln Phe Lys Arg Lys			
1330	1335	1340	
Thr Ile Leu Thr Thr Ser His Ala Phe Pro Tyr Ile Lys Thr Arg Val			
1345	1350	1355	1360
Asn Val Thr His Lys Glu Glu Ile Ile Leu Thr Pro Ile Glu Val Ala			
1365	1370	1375	
Ile Glu Asp Met Gln Lys Lys Thr Gln Glu Leu Ala Phe Ala Thr His			
1380	1385	1390	
Gln Asp Pro Ala Asp Pro Lys Met Leu Gln Met Val Leu Gln Gly Ser			
1395	1400	1405	
Val Gly Thr Thr Val Asn Gln Gly Pro Leu Glu Val Ala Gln Val Phe			
1410	1415	1420	
Leu Ser Glu Ile Pro Ser Asp Pro Lys Leu Phe Arg His His Asn Lys			

1425                      1430                      1435                      1440  
 Leu Arg Leu Cys Phe Lys Asp Phe Thr Lys Arg Cys Glu Asp Ala Leu  
                             1445                      1450                      1455  
 Arg Lys Asn Lys Ser Leu Ile Gly Pro Asp Gln Lys Glu Tyr Gln Arg  
                             1460                      1465                      1470  
 Glu Leu Glu Arg Asn Tyr His Arg Leu Lys Glu Ala Leu Gln Pro Leu  
                             1475                      1480                      1485  
 Ile Asn Arg Lys Ile Pro Gln Leu Tyr Lys Ala Val Leu Pro Val Thr  
                             1490                      1495                      1500  
 Cys His Arg Asp Ser Phe Ser Arg Met Ser Leu Arg Lys Met Asp Leu  
 1505                      1510                      1515                      1520

<210> 2821

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2821

Met His Trp Ser Trp Asn Trp Lys Ala Gln Val Gln Gly Pro Phe His  
     1                      5                      10                      15  
 Ser Leu Ile Ile Cys Val Pro Phe Arg Lys Ser Pro Thr Ser Trp Ala  
                             20                      25                      30  
 Ser Val Phe Ser Ser Ile Glu Cys Gly Phe Gly Gln Asp Val Leu Phe  
                             35                      40                      45  
 Lys Lys Ile Leu Lys Lys Ile Glu Thr Glu Phe Cys His Val Ala Gln  
                             50                      55                      60  
 Ala Gly Leu Glu Leu Leu Asp Ser Ser His Leu Pro Ala Leu Ala Phe  
                             65                      70                      75                      80



Gln Ser Thr Gly Ile Thr Gly Val Ser His His Ser Trp Pro Gly Gln  
                             85                            90                            95  
 Asp Val Leu Thr Asn Ser Phe Gln Leu Gln Arg Tyr Tyr Val Ile Leu  
                             100                            105                            110

<210> 2822

<211> 446

<212> PRT

<213> Homo sapiens

<400> 2822

Met Ser Phe Pro His Phe Gly His Pro Tyr Arg Gly Ala Ser Gln Phe  
     1                    5                            10                            15  
 Leu Ala Ser Ala Ser Ser Ser Thr Thr Cys Cys Glu Ser Thr Gln Arg  
                     20                            25                            30  
 Ser Val Ser Asp Val Ala Ser Gly Ser Thr Pro Ala Pro Ala Leu Cys  
                     35                            40                            45  
 Cys Ala Pro Tyr Asp Ser Arg Leu Leu Gly Ser Ala Arg Pro Glu Leu  
                     50                            55                            60  
 Gly Ala Ala Leu Gly Ile Tyr Gly Ala Pro Tyr Ala Ala Ala Ala Ala  
     65                            70                            75                            80  
 Ala Gln Ser Tyr Pro Gly Tyr Leu Pro Tyr Ser Pro Glu Pro Pro Ser  
                             85                            90                            95  
 Leu Tyr Gly Ala Leu Asn Pro Gln Tyr Glu Phe Lys Glu Ala Ala Gly  
                     100                            105                            110  
 Ser Phe Thr Ser Ser Leu Ala Gln Pro Gly Ala Tyr Tyr Pro Tyr Glu  
                     115                            120                            125  
 Arg Thr Leu Gly Gln Tyr Gln Tyr Glu Arg Tyr Gly Ala Val Glu Leu

130 135 140  
Ser Gly Ala Gly Arg Arg Lys Asn Ala Thr Arg Glu Thr Thr Ser Thr  
145 150 155 160  
Leu Lys Ala Trp Leu Asn Glu His Arg Lys Asn Pro Tyr Pro Thr Lys  
165 170 175  
Gly Glu Lys Ile Met Leu Ala Ile Ile Thr Lys Met Thr Leu Thr Gln  
180 185 190  
Val Ser Thr Trp Phe Ala Asn Ala Arg Arg Arg Leu Lys Lys Glu Asn  
195 200 205  
Lys Met Thr Trp Ala Pro Lys Asn Lys Gly Gly Glu Glu Arg Lys Ala  
210 215 220  
Glu Gly Gly Glu Glu Asp Ser Leu Gly Cys Leu Thr Ala Asp Thr Lys  
225 230 235 240  
Glu Val Thr Ala Ser Gln Glu Ala Arg Gly Leu Arg Leu Ser Asp Leu  
245 250 255  
Glu Asp Leu Glu Glu Glu Glu Glu Glu Glu Glu Ala Glu Asp Glu  
260 265 270  
Glu Val Val Ala Thr Ala Gly Asp Arg Leu Thr Glu Phe Arg Lys Gly  
275 280 285  
Ala Gln Ser Leu Pro Gly Pro Cys Ala Ala Ala Arg Glu Gly Arg Leu  
290 295 300  
Glu Arg Arg Glu Cys Gly Leu Ala Ala Pro Arg Phe Ser Phe Asn Asp  
305 310 315 320  
Pro Ser Gly Ser Glu Glu Ala Asp Phe Leu Ser Ala Glu Thr Gly Ser  
325 330 335  
Pro Arg Leu Thr Met His Tyr Pro Cys Leu Glu Lys Pro Arg Ile Trp  
340 345 350  
Ser Leu Ala His Thr Ala Thr Ala Ser Ala Val Glu Gly Ala Pro Pro  
355 360 365

Ala Arg Pro Arg Pro Arg Ser Pro Glu Cys Arg Met Ile Pro Gly Gln  
 370 375 380  
 Pro Pro Ala Ser Ala Arg Arg Leu Ser Val Pro Arg Asp Ser Ala Cys  
 385 390 395 400  
 Asp Glu Ser Ser Cys Ile Pro Lys Ala Phe Gly Asn Pro Lys Phe Ala  
 405 410 415  
 Leu Gln Gly Leu Pro Leu Asn Cys Ala Pro Cys Pro Arg Arg Ser Glu  
 420 425 430  
 Pro Val Val Gln Cys Gln Tyr Pro Ser Gly Ala Glu Ala Gly  
 435 440 445

&lt;210&gt; 2823

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2823

Met Leu Phe Gly Met Val Thr Lys Phe Cys Ser Gly His Ala Pro His  
 1 5 10 15  
 Phe Pro Met Lys Lys Val Leu Leu Leu Leu Trp Lys Thr Val Leu Cys  
 20 25 30  
 Thr Leu Gly Gly Phe Glu Glu Leu Gln Ser Met Lys Ala Glu Lys Arg  
 35 40 45  
 Ser Ile Leu Gly Leu Pro Pro Leu Pro Glu Asp Ser Ile Lys Val Ile  
 50 55 60  
 Arg Asn Met Arg Ala Ala Ser Pro Pro Ala Ser Ala Ser Asp Leu Ile  
 65 70 75 80  
 Glu Gln Gln Gln Lys Arg Gly Arg Arg Glu His Lys Ala Leu Ile Lys

	85		90		95
Gln Asp Asn Leu Asp Ala Phe Asn Glu Arg Asp Pro Tyr Lys Ala Asp					
100		105		110	
Asp Ser Arg Glu Glu Glu Glu Glu Asn Asp Asp Asp Asn Ser Leu Glu					
115		120		125	
Gly Glu Thr Phe Leu Leu Glu Arg Asp Glu Val Met Pro Pro Pro Leu					
130		135		140	
Gln His Pro Gln Thr Asp Arg Leu Thr Cys Pro Lys Gly Leu Pro Trp					
145		150		155	160
Ala Pro Lys Val Arg Glu Lys Asp Ile Glu Met Phe Leu Glu Ser Ser					
165		170		175	
Arg Ser Lys Phe Ile Gly Tyr Thr Leu Gly Ser Asp Thr Asn Thr Val					
180		185		190	
Val Gly Leu Pro Arg Pro Ile His Glu Ser Ile Lys Thr Leu Lys Gln					
195		200		205	
His Lys Tyr Thr Ser Ile Ala Glu Val Gln Ala Gln Met Glu Glu Glu					
210		215		220	
Tyr Leu Arg Ser Pro Leu Ser Gly Gly Glu Glu Glu Val Glu Gln Val					
225		230		235	240
Pro Ala Glu Thr Leu Tyr Gln Gly Leu Leu Pro Ser Leu Pro Gln Tyr					
245		250		255	
Met Ile Ala Leu Leu Lys Ile Leu Leu Ala Ala Ala Pro Thr Ser Lys					
260		265		270	
Ala Lys Thr Asp Ser Ile Asn Ile Leu Ala Asp Val Leu Pro Glu Glu					
275		280		285	
Met Pro Thr Thr Val Leu Gln Ser Met Lys Leu Gly Val Asp Val Asn					
290		295		300	
Arg His Lys Glu Val Ile Val Lys Ala Ile Ser Ala Val Leu Leu Leu					
305		310		315	320



35	40	45
Ala Leu Phe Glu Ala Cys Cys Lys Glu Arg Ile Gln Gln Phe Asp Asp		
50	55	60
Gly Gly Ser Asp Glu Glu Asp Ile Trp Glu Glu Lys His Ile Ala Phe		
65	70	75
Thr Pro Glu Ser Gln Arg Arg Ser Ser Ser Gly Ser Thr Asp Ser Glu		
85	90	95
Glu Ser Thr Asp Ser Glu Glu Glu Asp Gly Ala Lys Gln Asp Leu Phe		
100	105	110
Glu Pro Ser Ser Ala Asn Thr Glu Asp Lys Met Glu Val Asp Leu Ser		
115	120	125
Glu Pro Pro Asn Trp Ser Ala Asn Phe Asp Val Pro Met Glu Thr Thr		
130	135	140
His Gly Ala Pro Leu Asp Ser Val Gly Ser Asp Val Trp Ser Thr Glu		
145	150	155
Glu Pro Met Pro Thr Lys Glu Thr Gly Trp Ala Ser Phe Ser Glu Phe		
165	170	175
Thr Ser Ser Leu Ser Thr Lys Asp Ser Leu Arg Ser Asn Ser Pro Val		
180	185	190
Glu Met Glu Thr Ser Thr Glu Pro Met Asp Pro Leu Thr Pro Ser Ala		
195	200	205
Ala Ala Leu Ala Val Gln Pro Glu Ala Ala Gly Ser Val Ala Met Glu		
210	215	220
Ala Ser Ser Asp Gly Glu Glu Asp Ala Glu Ser Thr Asp Lys Val Thr		
225	230	235
Glu Thr Val Met Asn Gly Gly Met Lys Glu Thr Leu Ser Leu Thr Val		
245	250	255
Asp Ala Lys Thr Glu Thr Ala Val Phe Lys Arg Val Leu Lys Ser Tyr		
260	265	270

Arg Glu Glu Gly Lys Leu Ser Thr Ser Gln Asp Ala Ala Cys Lys Asp  
 275 280 285  
 Ala Glu Glu Cys Pro Glu Thr Ala Glu Ala Lys Cys Ala Ala Pro Arg  
 290 295 300  
 Pro Pro Ser Ser Ser Pro Glu Gln Arg Thr Gly Gln Pro Ser Ala Pro  
 305 310 315 320  
 Gly Asp Thr Ser Val Asn Gly Pro Val  
 325

<210> 2825

<211> 606

<212> PRT

<213> Homo sapiens

<400> 2825

Met Leu Lys Thr Phe Leu Phe Leu Glu Lys Tyr Phe Pro Cys Ile Lys  
 1 5 10 15  
 Tyr Ser Ser Ala Cys Phe Pro Gly Thr Gly Leu Asp Val Tyr Asp Ile  
 20 25 30  
 Lys Phe Ala Val Leu Leu His Pro Gln Thr Ala Leu His Phe Gly Pro  
 35 40 45  
 Pro Pro Ser Leu Met Ala Phe Ser Ser Leu Cys Cys Arg Glu Leu Leu  
 50 55 60  
 Glu Thr Thr Cys Arg Leu Ala Asn Thr Leu Lys Arg His Gly Val His  
 65 70 75 80  
 Arg Gly Asp Arg Val Ala Ile Tyr Met Pro Val Ser Pro Leu Ala Val  
 85 90 95  
 Ala Ala Met Leu Ala Cys Ala Arg Ile Gly Ala Val His Thr Val Ile

100	105	110
Phe Ala Gly Phe Ser Ala Glu Ser Leu Ala Gly Arg Ile Asn Asp Ala		
115	120	125
Lys Cys Lys Val Val Ile Thr Phe Asn Gln Gly Leu Arg Gly Gly Arg		
130	135	140
Val Val Glu Leu Lys Lys Ile Val Asp Glu Ala Val Lys His Cys Pro		
145	150	155
Thr Val Gln His Val Leu Val Ala His Arg Thr Asp Asn Lys Val His		
165	170	175
Met Gly Asp Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp		
180	185	190
Pro Val Cys Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met		
195	200	205
Leu Tyr Thr Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr		
210	215	220
Gln Ala Gly Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe		
225	230	235
Asp His Gln Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp		
245	250	255
Ile Thr Gly His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala		
260	265	270
Thr Ser Val Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg		
275	280	285
Tyr Trp Glu Thr Val Glu Arg Leu Lys Ile Asn Gln Phe Tyr Gly Ala		
290	295	300
Pro Thr Ala Val Arg Leu Leu Leu Lys Tyr Gly Asp Ala Trp Val Lys		
305	310	315
Lys Tyr Asp Arg Ser Ser Leu Arg Thr Leu Gly Ser Val Gly Glu Pro		
325	330	335



Ile Asn Cys Glu Ala Trp Glu Trp Leu His Arg Val Val Gly Asp Ser  
340 345 350  
Arg Cys Thr Leu Val Asp Thr Trp Trp Gln Thr Glu Thr Gly Gly Ile  
355 360 365  
Cys Ile Ala Pro Arg Pro Ser Glu Glu Gly Ala Glu Ile Leu Pro Ala  
370 375 380  
Met Ala Met Arg Pro Phe Phe Gly Ile Val Pro Val Leu Met Asp Glu  
385 390 395 400  
Lys Gly Ser Val Val Glu Gly Ser Asn Val Ser Gly Ala Leu Cys Ile  
405 410 415  
Ser Gln Ala Trp Pro Gly Met Ala Arg Thr Ile Tyr Gly Asp His Gln  
420 425 430  
Arg Phe Val Asp Ala Tyr Phe Lys Ala Tyr Pro Gly Tyr Tyr Phe Thr  
435 440 445  
Gly Asp Gly Ala Tyr Arg Thr Glu Gly Gly Tyr Tyr Gln Ile Thr Gly  
450 455 460  
Arg Met Asp Asp Val Ile Asn Ile Ser Gly His Arg Leu Gly Thr Ala  
465 470 475 480  
Glu Ile Glu Asp Ala Ile Ala Asp His Pro Ala Val Pro Glu Ser Ala  
485 490 495  
Val Ile Gly Tyr Pro His Asp Ile Lys Gly Glu Ala Ala Phe Ala Phe  
500 505 510  
Ile Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln Glu  
515 520 525  
Leu Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro Asp  
530 535 540  
Glu Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys Val  
545 550 555 560  
Met Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu Leu

	565		570		575										
Gly	Asp	Thr	Thr	Thr	Leu	Glu	Asp	Pro	Ser	Ile	Ile	Ala	Glu	Ile	Leu
	580		585		590										
Ser	Val	Tyr	Gln	Lys	Cys	Lys	Asp	Lys	Gln	Ala	Ala	Ala	Lys		
	595		600		605										

&lt;210&gt; 2826

&lt;211&gt; 1088

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2826

Met	Pro	Arg	Thr	Gly	Phe	Cys	Cys	Phe	Thr	Val	Ser	Leu	Phe	Val	Trp
1				5				10					15		
Met	Asp	Met	Ser	Met	Cys	Val	Ser	Leu	Ser	Arg	Cys	Val	Cys	Val	Tyr
			20					25					30		
Val	Ser	Ile	His	Pro	Pro	Gln	Cys	Leu	Asn	Ser	Leu	Leu	Val	Ile	Glu
			35					40					45		
Gly	Lys	Gly	Leu	Ile	Ser	Lys	Gln	Pro	Gly	Thr	Cys	Asp	Pro	Tyr	Val
			50				55					60			
Lys	Ile	Ser	Leu	Ile	Pro	Glu	Asp	Ser	Arg	Leu	Arg	His	Gln	Lys	Thr
			65				70				75			80	
Gln	Thr	Val	Pro	Asp	Cys	Arg	Asp	Pro	Ala	Phe	His	Glu	His	Phe	Phe
					85					90				95	
Phe	Pro	Val	Gln	Glu	Glu	Asp	Asp	Gln	Lys	Arg	Leu	Leu	Val	Thr	Val
			100					105					110		
Trp	Asn	Arg	Ala	Ser	Gln	Ser	Arg	Gln	Ser	Gly	Leu	Ile	Gly	Cys	Met
			115					120					125		

Ser Phe Gly Val Lys Ser Leu Leu Thr Pro Asp Lys Glu Ile Ser Gly  
130 135 140

Trp Tyr Tyr Leu Leu Gly Glu His Leu Gly Arg Thr Lys His Leu Lys  
145 150 155 160

Val Ala Arg Arg Arg Leu Arg Pro Leu Arg Asp Pro Leu Leu Arg Met  
165 170 175

Pro Gly Gly Gly Asp Thr Glu Asn Gly Lys Lys Leu Lys Ile Thr Ile  
180 185 190

Pro Arg Gly Lys Asp Gly Phe Gly Phe Thr Ile Cys Cys Asp Ser Pro  
195 200 205

Val Arg Val Gln Ala Val Asp Ser Gly Gly Pro Ala Glu Arg Ala Gly  
210 215 220

Leu Gln Gln Leu Asp Thr Val Leu Gln Leu Asn Glu Arg Pro Val Glu  
225 230 235 240

His Trp Lys Cys Val Glu Leu Ala His Glu Ile Arg Ser Cys Pro Ser  
245 250 255

Glu Ile Ile Leu Leu Val Trp Arg Met Val Pro Gln Val Lys Pro Gly  
260 265 270

Pro Asp Gly Gly Val Leu Arg Arg Ala Ser Cys Lys Ser Thr His Asp  
275 280 285

Leu Gln Ser Pro Pro Asn Lys Arg Glu Lys Asn Cys Thr His Gly Val  
290 295 300

Gln Ala Arg Pro Glu Gln Arg His Ser Cys His Leu Val Cys Asp Ser  
305 310 315 320

Ser Asp Gly Leu Leu Leu Gly Gly Trp Glu Arg Tyr Thr Glu Val Ala  
325 330 335

Lys Arg Gly Gly Gln His Thr Leu Pro Ala Leu Ser Arg Ala Thr Ala  
340 345 350

Pro Thr Asp Pro Asn Tyr Ile Ile Leu Ala Pro Leu Asn Pro Gly Ser

355	360	365
Gln Leu Leu Arg Pro Val Tyr Gln Glu Tyr Thr Ile Pro Glu Glu Ser		
370	375	380
Gly Ser Pro Ser Lys Gly Lys Ser Tyr Thr Gly Leu Gly Lys Lys Ser		
385	390	395
Arg Leu Met Lys Thr Val Gln Thr Met Lys Gly His Gly Asn Tyr Gln		
405	410	415
Asn Cys Pro Val Val Arg Pro His Ala Thr His Ser Ser Tyr Gly Thr		
420	425	430
Tyr Val Thr Leu Ala Pro Lys Val Leu Val Phe Pro Val Phe Val Gln		
435	440	445
Pro Leu Asp Leu Cys Asn Pro Ala Arg Thr Leu Leu Leu Ser Glu Gly		
450	455	460
Leu Leu Leu Tyr Glu Gly Arg Asn Lys Ala Ala Glu Val Thr Leu Phe		
465	470	475
Ala Tyr Ser Asp Leu Leu Leu Phe Thr Lys Glu Asp Glu Pro Gly Arg		
485	490	495
Cys Asp Val Leu Arg Asn Pro Leu Tyr Leu Gln Ser Val Lys Leu Gln		
500	505	510
Glu Gly Ser Ser Glu Asp Leu Lys Phe Cys Val Leu Tyr Leu Ala Glu		
515	520	525
Lys Ala Glu Cys Leu Phe Thr Leu Glu Ala His Ser Gln Glu Gln Lys		
530	535	540
Lys Arg Val Cys Trp Cys Leu Ser Glu Asn Ile Ala Lys Gln Gln Gln		
545	550	555
Leu Ala Ala Ser Pro Pro Asp Ser Lys Met Phe Glu Thr Glu Ala Asp		
565	570	575
Glu Lys Arg Glu Met Ala Leu Glu Glu Gly Lys Gly Pro Gly Ala Glu		
580	585	590

Asp Ser Pro Pro Ser Lys Glu Pro Ser Pro Gly Gln Glu Leu Pro Pro  
 595 600 605  
 Gly Gln Asp Leu Pro Pro Asn Lys Asp Ser Pro Ser Gly Gln Glu Pro  
 610 615 620  
 Ala Pro Ser Gln Glu Pro Leu Ser Ser Lys Asp Ser Ala Thr Ser Glu  
 625 630 635 640  
 Gly Ser Pro Pro Gly Pro Asp Ala Pro Pro Ser Lys Asp Val Pro Pro  
 645 650 655  
 Cys Gln Glu Pro Pro Pro Ala Gln Asp Leu Ser Pro Cys Gln Asp Leu  
 660 665 670  
 Pro Ala Gly Gln Glu Pro Leu Pro His Gln Asp Pro Leu Leu Thr Lys  
 675 680 685  
 Asp Leu Pro Ala Ile Gln Glu Ser Pro Thr Arg Asp Leu Pro Pro Cys  
 690 695 700  
 Gln Asp Leu Pro Pro Ser Gln Val Ser Leu Pro Ala Lys Ala Leu Thr  
 705 710 715 720  
 Glu Asp Thr Met Ser Ser Gly Asp Leu Leu Ala Ala Thr Gly Asp Pro  
 725 730 735  
 Pro Ala Ala Pro Arg Pro Ala Phe Val Ile Pro Glu Val Arg Leu Asp  
 740 745 750  
 Ser Thr Tyr Ser Gln Lys Ala Gly Ala Glu Gln Gly Cys Ser Gly Asp  
 755 760 765  
 Glu Glu Asp Ala Glu Glu Ala Glu Glu Val Glu Glu Gly Glu Glu Gly  
 770 775 780  
 Glu Glu Asp Glu Asp Glu Asp Thr Ser Asp Asp Asn Tyr Gly Glu Arg  
 785 790 795 800  
 Ser Glu Ala Lys Arg Ser Ser Met Ile Glu Thr Gly Gln Gly Ala Glu  
 805 810 815  
 Gly Gly Leu Ser Leu Arg Val Gln Asn Ser Leu Arg Arg Arg Thr His

820 825 830  
Ser Glu Gly Ser Leu Leu Gln Glu Pro Arg Gly Pro Cys Phe Ala Ser  
835 840 845  
Asp Thr Thr Leu His Cys Ser Asp Gly Glu Gly Ala Ala Ser Thr Trp  
850 855 860  
Gly Met Pro Ser Pro Ser Thr Leu Lys Lys Glu Leu Gly Arg Asn Gly  
865 870 875 880  
Gly Ser Met His His Leu Ser Leu Phe Phe Thr Gly His Arg Lys Met  
885 890 895  
Ser Gly Ala Asp Thr Val Gly Asp Asp Asp Glu Ala Ser Arg Lys Arg  
900 905 910  
Lys Ser Lys Asn Leu Ala Lys Asp Met Lys Asn Lys Leu Gly Ile Phe  
915 920 925  
Arg Arg Arg Asn Glu Ser Pro Gly Ala Pro Pro Ala Gly Lys Ala Asp  
930 935 940  
Lys Met Met Lys Ser Phe Lys Pro Thr Ser Glu Glu Ala Leu Lys Trp  
945 950 955 960  
Gly Glu Ser Leu Glu Lys Leu Leu Val His Lys Tyr Gly Leu Ala Val  
965 970 975  
Phe Gln Ala Phe Leu Arg Thr Glu Phe Ser Glu Glu Asn Leu Glu Phe  
980 985 990  
Trp Leu Ala Cys Glu Asp Phe Lys Lys Val Lys Ser Gln Ser Lys Met  
995 1000 1005  
Ala Ser Lys Ala Lys Lys Ile Phe Ala Glu Tyr Ile Ala Ile Gln Ala  
1010 1015 1020  
Cys Lys Glu Val Asn Leu Asp Ser Tyr Thr Arg Glu His Thr Lys Asp  
1025 1030 1035 1040  
Asn Leu Gln Ser Val Thr Arg Gly Cys Phe Asp Leu Ala Gln Lys Arg  
1045 1050 1055

Ile Phe Gly Leu Met Glu Lys Asp Ser Tyr Pro Arg Phe Leu Arg Ser

1060

1065

1070

Asp Leu Tyr Leu Asp Leu Ile Asn Gln Lys Lys Met Ser Pro Pro Leu

1075

1080

1085

<210> 2827

<211> 1317

<212> PRT

<213> Homo sapiens

<400> 2827

Met Glu Glu Glu Lys Asp Asp Ser Pro Gln Leu Thr Gly Ile Ala Val

1

5

10

15

Gly Ala Leu Leu Ala Leu Ala Leu Val Gly Val Leu Ile Leu Phe Met

20

25

30

Phe Arg Arg Leu Arg Gln Phe Arg Gln Ala Gln Pro Thr Pro Gln Tyr

35

40

45

Arg Phe Arg Lys Arg Asp Lys Val Met Phe Tyr Gly Arg Lys Ile Met

50

55

60

Arg Lys Val Thr Thr Leu Pro Asn Thr Leu Val Glu Asn Thr Ala Leu

65

70

75

80

Pro Arg Gln Arg Ala Arg Lys Arg Thr Lys Val Leu Ser Leu Ala Lys

85

90

95

Arg Ile Leu Arg Phe Lys Lys Glu Tyr Pro Ala Leu Gln Pro Lys Glu

100

105

110

Pro Pro Pro Ser Leu Leu Glu Ala Asp Leu Thr Glu Phe Asp Val Lys

115

120

125

Asn Ser His Leu Pro Ser Glu Val Leu Tyr Met Leu Lys Asn Val Arg

130 135 140  
Val Leu Gly His Phe Glu Lys Pro Leu Phe Leu Glu Leu Cys Lys His  
145 150 155 160  
Ile Val Phe Val Gln Leu Gln Glu Gly Glu His Val Phe Gln Pro Arg  
165 170 175  
Glu Pro Asp Pro Ser Ile Cys Val Val Gln Asp Gly Arg Leu Glu Val  
180 185 190  
Cys Ile Gln Asp Thr Asp Gly Thr Glu Val Val Val Lys Glu Val Leu  
195 200 205  
Ala Gly Asp Ser Val His Ser Leu Leu Ser Ile Leu Asp Ile Ile Thr  
210 215 220  
Gly His Ala Ala Pro Tyr Lys Thr Val Ser Val Arg Ala Ala Ile Pro  
225 230 235 240  
Ser Thr Ile Leu Arg Leu Pro Ala Ala Ala Phe His Gly Val Phe Glu  
245 250 255  
Lys Tyr Pro Glu Thr Leu Val Arg Val Val Gln Ile Ile Met Val Arg  
260 265 270  
Leu Gln Arg Val Thr Phe Leu Ala Leu His Asn Tyr Leu Gly Leu Thr  
275 280 285  
Thr Glu Leu Phe Asn Ala Glu Ser Gln Ala Ile Pro Leu Val Ser Val  
290 295 300  
Ala Ser Val Ala Ala Gly Lys Ala Lys Lys Gln Val Phe Tyr Gly Glu  
305 310 315 320  
Glu Glu Arg Leu Lys Met Pro Pro Arg Leu Gln Glu Ser Cys Asp Ser  
325 330 335  
Asp His Gly Gly Gly Arg Pro Ala Ala Ala Gly Pro Leu Leu Lys Arg  
340 345 350  
Ser His Ser Val Pro Ala Pro Ser Ile Arg Lys Gln Ile Leu Glu Glu  
355 360 365



Leu Glu Lys Pro Gly Ala Gly Asp Pro Asp Pro Ser Ala Pro Gln Gly  
370 375 380

Gly Pro Gly Ser Ala Thr Ser Asp Leu Gly Met Ala Cys Asp Arg Ala  
385 390 395 400

Arg Val Phe Leu His Ser Asp Glu Asp Pro Gly Ser Ser Val Ala Ser  
405 410 415

Lys Ser Arg Lys Ser Val Met Val Ala Glu Ile Pro Ser Thr Val Ser  
420 425 430

Gln His Ser Glu Ser His Thr Asp Glu Thr Leu Ala Ser Arg Lys Ser  
435 440 445

Asp Ala Ile Phe Arg Ala Ala Lys Lys Asp Leu Leu Thr Leu Met Lys  
450 455 460

Leu Glu Asp Ser Ser Leu Leu Asp Gly Arg Val Ala Leu Leu His Val  
465 470 475 480

Pro Ala Gly Thr Val Val Ser Arg Gln Gly Asp Gln Asp Ala Ser Ile  
485 490 495

Leu Phe Val Val Ser Gly Leu Leu His Val Tyr Gln Arg Lys Ile Gly  
500 505 510

Ser Gln Glu Asp Thr Cys Leu Phe Leu Thr Arg Pro Gly Glu Met Val  
515 520 525

Gly Gln Leu Ala Val Leu Thr Gly Glu Pro Leu Ile Phe Thr Val Lys  
530 535 540

Ala Asn Arg Asp Cys Ser Phe Leu Ser Ile Ser Lys Ala His Phe Tyr  
545 550 555 560

Glu Ile Met Arg Lys Gln Pro Thr Val Val Leu Gly Val Ala His Thr  
565 570 575

Val Val Lys Arg Met Ser Ser Phe Val Arg Gln Ile Asp Phe Ala Leu  
580 585 590

Asp Trp Val Glu Val Glu Ala Gly Arg Ala Ile Tyr Arg Gln Gly Asp

595	600	605
Lys Ser Asp Cys Thr Tyr Ile Met Leu Ser Gly Arg Leu Arg Ser Val		
610	615	620
Ile Arg Lys Asp Asp Gly Lys Lys Arg Leu Ala Gly Glu Tyr Gly Arg		
625	630	635
Gly Asp Leu Val Gly Val Val Glu Thr Leu Thr His Gln Ala Arg Ala		
645	650	655
Thr Thr Val His Ala Val Arg Asp Ser Glu Leu Ala Lys Leu Pro Ala		
660	665	670
Gly Ala Leu Thr Ser Ile Lys Arg Arg Tyr Pro Gln Val Val Thr Arg		
675	680	685
Leu Ile His Leu Leu Gly Glu Lys Ile Leu Gly Ser Leu Gln Gln Gly		
690	695	700
Pro Val Thr Gly His Gln Leu Gly Leu Pro Thr Glu Gly Ser Lys Trp		
705	710	715
Asp Leu Gly Asn Pro Ala Val Asn Leu Ser Thr Val Ala Val Met Pro		
725	730	735
Val Ser Glu Glu Val Pro Leu Thr Ala Phe Ala Leu Glu Leu Glu His		
740	745	750
Ala Leu Ser Ala Ile Gly Pro Thr Leu Leu Leu Thr Ser Asp Asn Ile		
755	760	765
Lys Arg Arg Leu Gly Ser Ala Ala Leu Asp Ser Val His Glu Tyr Arg		
770	775	780
Leu Ser Ser Trp Leu Gly Gln Gln Glu Asp Thr His Arg Ile Val Leu		
785	790	795
Tyr Gln Ala Asp Gly Thr Leu Thr Pro Trp Thr Gln Arg Cys Val Arg		
805	810	815
Gln Ala Asp Cys Ile Leu Ile Val Gly Leu Gly Asp Gln Glu Pro Thr		
820	825	830

Val Gly Glu Leu Glu Arg Met Leu Glu Ser Thr Ala Val Arg Ala Gln  
835 840 845

Lys Gln Leu Ile Leu Leu His Arg Glu Glu Gly Pro Ala Pro Ala Arg  
850 855 860

Thr Val Glu Trp Leu Asn Met Arg Ser Trp Cys Ser Gly His Leu His  
865 870 875 880

Leu Cys Cys Pro Arg Arg Val Phe Ser Arg Arg Ser Leu Pro Lys Leu  
885 890 895

Val Glu Met Tyr Lys His Val Phe Gln Arg Pro Pro Asp Arg His Ser  
900 905 910

Asp Phe Ser Arg Leu Ala Arg Val Leu Thr Gly Asn Ala Ile Ala Leu  
915 920 925

Val Leu Gly Gly Gly Gly Ala Arg Gly Cys Ala Gln Val Gly Val Leu  
930 935 940

Lys Ala Leu Ala Glu Cys Gly Ile Pro Val Asp Met Val Gly Gly Thr  
945 950 955 960

Ser Ile Gly Ala Phe Val Gly Ala Leu Tyr Ser Glu Glu Arg Asn Tyr  
965 970 975

Ser Gln Met Arg Ile Arg Ala Lys Gln Trp Ala Glu Gly Met Thr Ser  
980 985 990

Leu Met Lys Ala Ala Leu Asp Leu Thr Tyr Pro Ile Thr Ser Met Phe  
995 1000 1005

Ser Gly Ala Gly Phe Asn Ser Ser Ile Phe Ser Val Phe Lys Asp Gln  
1010 1015 1020

Gln Ile Glu Asp Leu Trp Ile Pro Tyr Phe Ala Ile Thr Thr Asp Ile  
1025 1030 1035 1040

Thr Ala Ser Ala Met Arg Val His Thr Asn Gly Ser Leu Trp Arg Tyr  
1045 1050 1055

Val Arg Ala Ser Met Ser Leu Ser Gly Tyr Met Pro Pro Leu Cys Asp

1060	1065	1070	
Pro Lys Asp Gly His Leu Leu Met Asp Gly Gly Tyr Ile Asn Asn Leu			
1075	1080	1085	
Pro Ala Asp Val Ala Arg Ser Met Gly Ala Lys Val Val Ile Ala Ile			
1090	1095	1100	
Asp Val Gly Ser Arg Asp Glu Thr Asp Leu Thr Asn Tyr Gly Asp Ala			
1105	1110	1115	1120
Leu Ser Gly Trp Trp Leu Leu Trp Lys Arg Trp Asn Pro Leu Ala Thr			
1125	1130	1135	
Lys Val Lys Val Leu Asn Met Ala Glu Ile Gln Thr Arg Leu Ala Tyr			
1140	1145	1150	
Val Cys Cys Val Arg Gln Leu Glu Val Val Lys Ser Ser Asp Tyr Cys			
1155	1160	1165	
Glu Tyr Leu Arg Pro Pro Ile Asp Ser Tyr Ser Thr Leu Asp Phe Gly			
1170	1175	1180	
Lys Phe Asn Glu Ile Cys Glu Val Gly Tyr Gln His Gly Arg Thr Val			
1185	1190	1195	1200
Phe Asp Ile Trp Gly Arg Ser Gly Val Leu Glu Lys Met Leu Arg Asp			
1205	1210	1215	
Gln Gln Gly Pro Ser Lys Lys Pro Ala Ser Ala Val Leu Thr Cys Pro			
1220	1225	1230	
Asn Ala Ser Phe Thr Asp Leu Ala Glu Ile Val Ser Arg Ile Glu Pro			
1235	1240	1245	
Ala Lys Pro Ala Met Val Asp Asp Glu Ser Asp Tyr Gln Thr Glu Tyr			
1250	1255	1260	
Glu Glu Glu Leu Leu Asp Val Pro Arg Asp Ala Tyr Ala Asp Phe Gln			
1265	1270	1275	1280
Ser Thr Ser Ala Gln Gln Gly Ser Asp Leu Glu Asp Glu Ser Ser Leu			
1285	1290	1295	

Arg His Arg His Pro Ser Leu Ala Phe Pro Lys Leu Ser Glu Gly Ser

1300

1305

1310

Ser Asp Gln Asp Gly

1315

<210> 2828

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2828

Met Gly Gln Asn Met Ala His His Gly Ile Thr Gly His Ala Trp Pro

1

5

10

15

Pro Met Val Ser Val Glu Glu Gly Ile Gln Arg Leu Arg Glu Ile Gly

20

25

30

Met Leu Glu Trp Ile Cys Leu Pro His Ala Ala Phe Val Pro Leu Leu

35

40

45

Glu Trp Ile Cys Pro Pro Tyr Ser Pro Leu Pro Pro Pro Leu Gln Pro

50

55

60

Ser Thr Thr Leu Leu Leu His Pro Ser Ser Ser Ser Ser Pro Pro Pro

65

70

75

80

Ser Pro Leu Pro Leu Gln Leu Ser Thr Thr Leu Leu Leu Pro Leu Gln

85

90

95

Phe Ser Phe Leu Cys Ser Pro Pro Pro Pro Pro Leu Pro Ala Leu Leu

100

105

110

Pro Leu Pro Cys Asn Thr Pro Pro Pro Leu Ala Ala Phe Leu Pro Leu

115

120

125

Leu Leu Pro Leu Gln Pro Ser Thr Leu Leu Pro Cys Ser Ser Thr Leu

130                      135                      140  
 Phe Phe Val Ala Leu Leu Leu Ile Gln Pro Ser Thr Pro Pro Leu Ala  
 145                      150                      155                      160  
 Ala Leu Leu Pro Pro Leu Pro Pro Pro Val Cys Ser Leu Gln Leu Pro  
                          165                      170                      175  
 Pro Pro Pro Ile Leu Leu Ser Leu Ile Phe Pro Gln Asp Pro Ala Leu  
                          180                      185                      190  
 Met Pro Ala Pro Gln Ala Phe Ala Asp Pro  
                          195                      200

<210> 2829

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2829

Met Thr Ser Thr Leu Phe Phe Ser Phe Leu Leu Trp Trp Leu Arg Thr  
                          1                      5                      10                      15  
 Asp Asn Glu Trp Ser Leu Tyr Ser Pro Gly Leu Ser Trp Val Val Ala  
                          20                      25                      30  
 Ile Met Pro Leu Cys Ser Leu Glu Arg Ala Ala Gly Phe Val Glu Leu  
                          35                      40                      45  
 Arg Ile Pro Thr Phe Pro Asp Ile Ala Asn Leu Phe Ser Phe Ser Ser  
                          50                      55                      60  
 Thr Ser Pro Leu Glu Lys Ser Tyr Cys Ser Val Pro Glu Gly Leu Cys  
                          65                      70                      75                      80  
 His Lys Arg Val Gly Asp Ile Pro Arg Glu Phe Gln His Pro Phe Gly  
                          85                      90                      95

Leu Ser Gln Ser Glu Met Ala Ala Val Lys Ala Ser Thr Ser Lys Ala  
100 105 110  
Thr Arg Pro Trp Tyr Ser His Pro Val Tyr Ala Arg Tyr Trp Gln His  
115 120 125  
Tyr His Gln Ala Met Ala Trp Met Gln Ser His His Asn Ala Tyr Arg  
130 135 140  
Lys Ala Val Glu Ser Cys Phe Asn Leu Pro Trp Tyr Leu Pro Ser Ala  
145 150 155 160  
Leu Leu Pro Gln Ser Ser Tyr Asp Asn Glu Ala Ala Tyr Pro Gln Ser  
165 170 175  
Phe Tyr Asp His His Val Ala Trp Gln Asp Tyr Pro Cys Ser Ser Ser  
180 185 190  
His Phe Arg Arg Ser Gly Gln His Pro Arg Tyr Ser Ser Arg Ile Gln  
195 200 205  
Ala Ser Thr Lys Glu Asp Gln Ala Leu Ser Lys Glu Glu Glu Met Glu  
210 215 220  
Thr Glu Ser Asp Ala Glu Val Glu Cys Asp Leu Ser Asn Met Glu Ile  
225 230 235 240  
Thr Glu Glu Leu Arg Gln Tyr Phe Ala Glu Thr Glu Arg His Arg Glu  
245 250 255  
Glu Arg Arg Arg Gln Gln Gln Leu Asp Ala Glu Arg Leu Asp Ser Tyr  
260 265 270  
Val Asn Ala Asp His Asp Leu Tyr Cys Asn Thr Arg Arg Ser Val Glu  
275 280 285  
Ala Pro Thr Glu Arg Pro Gly Glu Arg Arg Gln Ala Glu Met Lys Arg  
290 295 300  
Leu Tyr Gly Asp Ser Ala Ala Lys Ile Gln Ala Met Glu Ala Ala Val  
305 310 315 320  
Gln Leu Ser Phe Asp Lys His Cys Asp Arg Lys Gln Pro Lys Tyr Trp

325 330 335  
Pro Val Ile Pro Leu Lys Phe  
340

<210> 2830

<211> 748

<212> PRT

<213> Homo sapiens

<400> 2830

Met Lys His Ile Glu Val Ile Val Lys Ala Arg Gln Lys Val Lys Asn  
1 5 10 15  
Thr Glu Phe Leu Gln Gln Ala Ala Leu Glu Glu Tyr Gly Pro Glu Leu  
20 25 30  
His Val Ala Leu Arg Ser Arg Arg Asp Glu Leu His Tyr Leu Arg Lys  
35 40 45  
Leu Thr Glu Leu Leu Phe Pro Tyr Ile Leu Pro Pro Lys Ala Thr Asp  
50 55 60  
Cys Arg Ser Leu Thr Leu Leu Ile Arg Glu Ile Leu Ser Gly Ser Val  
65 70 75 80  
Phe Leu Pro Ser Leu Asp Phe Leu Ala Asp Pro Asp Thr Val Asn His  
85 90 95  
Leu Leu Ile Ile Phe Ile Asp Asp Ser Pro Pro Glu Lys Ala Thr Glu  
100 105 110  
Pro Ala Ser Pro Leu Val Pro Phe Leu Gln Lys Phe Ala Glu Pro Arg  
115 120 125  
Asn Lys Lys Pro Ser Val Leu Lys Leu Glu Leu Lys Gln Ile Arg Glu  
130 135 140



Gln Gln Asp Leu Leu Phe Arg Phe Met Asn Phe Leu Lys Gln Glu Gly  
145 150 155 160  
Ala Val His Val Leu Gln Phe Cys Leu Thr Val Glu Glu Phe Asn Asp  
165 170 175  
Arg Ile Leu Arg Pro Glu Leu Ser Asn Asp Glu Met Leu Ser Leu His  
180 185 190  
Glu Glu Leu Gln Lys Ile Tyr Lys Thr Tyr Cys Leu Asp Glu Ser Ile  
195 200 205  
Asp Lys Ile Arg Phe Asp Pro Phe Ile Val Glu Glu Ile Gln Arg Ile  
210 215 220  
Ala Glu Gly Pro Tyr Ile Asp Val Val Lys Leu Gln Thr Met Arg Cys  
225 230 235 240  
Leu Phe Glu Ala Tyr Glu His Val Leu Ser Leu Leu Glu Asn Val Phe  
245 250 255  
Thr Pro Met Phe Cys His Ser Asp Glu Tyr Phe Arg Gln Leu Leu Arg  
260 265 270  
Gly Ala Glu Ser Pro Thr Arg Asn Ser Lys Leu Asn Arg Gly Ser Leu  
275 280 285  
Ser Leu Asp Asp Phe Arg Asn Thr Gln Lys Arg Gly Glu Ser Phe Gly  
290 295 300  
Ile Ser Arg Ile Gly Ser Lys Ile Lys Gly Val Phe Lys Ser Thr Thr  
305 310 315 320  
Met Glu Gly Ala Met Leu Pro Asn Tyr Gly Val Ala Glu Gly Glu Asp  
325 330 335  
Asp Phe Ile Glu Glu Gly Ile Val Val Met Gly Asp Asp Ser Pro Val  
340 345 350  
Glu Ala Val Ser Thr Pro Asn Thr Pro Arg Asn Leu Ala Ala Trp Lys  
355 360 365  
Ile Ser Ile Pro Tyr Val Asp Phe Phe Glu Asp Pro Ser Ser Glu Arg

370 375 380  
Lys Glu Lys Lys Glu Arg Ile Pro Val Phe Cys Ile Asp Val Glu Arg  
385 390 395 400  
Asn Asp Arg Arg Ala Val Gly His Glu Pro Glu His Trp Ser Val Tyr  
405 410 415  
Arg Arg Tyr Leu Glu Phe Tyr Val Leu Glu Ser Lys Leu Thr Glu Phe  
420 425 430  
His Gly Ala Phe Pro Asp Ala Gln Leu Pro Ser Lys Arg Ile Ile Gly  
435 440 445  
Pro Lys Asn Tyr Glu Phe Leu Lys Ser Lys Arg Glu Glu Phe Gln Glu  
450 455 460  
Tyr Leu Gln Lys Leu Leu Gln His Pro Glu Leu Ser Asn Ser Gln Leu  
465 470 475 480  
Leu Ala Asp Phe Leu Ser Pro Asn Gly Gly Glu Thr Gln Phe Leu Asp  
485 490 495  
Lys Ile Leu Pro Asp Val Asn Leu Gly Lys Ile Ile Lys Ser Val Pro  
500 505 510  
Gly Lys Leu Met Lys Glu Lys Gly Gln His Leu Glu Pro Phe Ile Met  
515 520 525  
Asn Phe Ile Asn Ser Cys Glu Ser Pro Lys Pro Lys Pro Ser Arg Pro  
530 535 540  
Glu Leu Thr Ile Leu Ser Pro Thr Ser Glu Asn Asn Lys Lys Leu Phe  
545 550 555 560  
Asn Asp Leu Phe Lys Asn Asn Ala Asn Arg Ala Glu Asn Thr Glu Arg  
565 570 575  
Lys Gln Asn Gln Asn Tyr Phe Met Glu Val Met Thr Val Glu Gly Val  
580 585 590  
Tyr Asp Tyr Leu Met Tyr Val Gly Arg Val Val Phe Gln Val Pro Asp  
595 600 605

Trp Leu His His Leu Leu Met Gly Thr Arg Ile Leu Phe Lys Asn Thr  
 610 615 620  
 Leu Glu Met Tyr Thr Asp Tyr Tyr Leu Gln Cys Lys Leu Glu Gln Leu  
 625 630 635 640  
 Phe Gln Glu His Arg Leu Val Ser Leu Ile Thr Leu Leu Arg Asp Ala  
 645 650 655  
 Ile Phe Cys Glu Asn Thr Glu Pro Arg Ser Leu Gln Asp Lys Gln Lys  
 660 665 670  
 Gly Ala Lys Gln Thr Phe Glu Glu Met Met Asn Tyr Ile Pro Asp Leu  
 675 680 685  
 Leu Val Lys Cys Ile Gly Glu Glu Thr Lys Tyr Glu Ser Ile Arg Leu  
 690 695 700  
 Leu Phe Asp Gly Leu Gln Gln Pro Val Leu Asn Lys Gln Leu Thr Tyr  
 705 710 715 720  
 Val Leu Leu Asp Ile Val Ile Gln Glu Leu Phe Pro Glu Leu Asn Lys  
 725 730 735  
 Val Gln Lys Glu Val Thr Ser Val Thr Ser Trp Met  
 740 745

&lt;210&gt; 2831

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2831

Met Ala His Ser Val Ser Ala Asp Gly Lys Ser Pro Val Val Leu Ser  
 1 5 10 15  
 His Val Ser Leu Ser Ser Gln Gly Arg Ile Ala Cys Ala Asn Val Leu

20	25	30
Ser Asp Leu Tyr Ala Met Gly Val Thr Glu Cys Asp Asn Met Leu Met		
35	40	45
Leu Leu Gly Val Ser Asn Lys Met Thr Asp Arg Glu Arg Asp Lys Val		
50	55	60
Met Pro Leu Ile Ile Gln Gly Phe Lys Asp Ala Ala Glu Glu Ala Gly		
65	70	75
80		
Thr Ser Val Thr Gly Gly Gln Thr Val Leu Asn Pro Trp Ile Val Leu		
85	90	95
Gly Gly Val Ala Thr Thr Val Cys Gln Pro Asn Glu Phe Ile Met Pro		
100	105	110
Asp Asn Ala Val Pro Gly Asp Val Leu Val Leu Thr Lys Pro Leu Gly		
115	120	125
Thr Gln Val Ala Val Ala Val His Gln Trp Leu Asp Ile Pro Glu Lys		
130	135	140
Trp Asn Lys Ile Lys Leu Val Val Thr Gln Glu Asp Val Glu Leu Ala		
145	150	155
160		
Tyr Gln Glu Ala Met Met Asn Met Ala Arg Leu Asn Arg Thr Ala Ala		
165	170	175
Gly Leu Met His Thr Phe Asn Ala His Ala Ala Thr Asp Ile Thr Gly		
180	185	190
Phe Gly Ile Leu Gly His Ala Gln Asn Leu Ala Lys Gln Gln Arg Asn		
195	200	205
Glu Val Ser Phe Val Ile His Asn Leu Pro Val Leu Ala Lys Met Ala		
210	215	220
Ala Val Ser Lys Ala Cys Gly Asn Met Phe Gly Leu Met His Gly Thr		
225	230	235
240		
Cys Pro Glu Thr Ser Gly Gly Leu Leu Ile Cys Leu Ser Arg Glu Gln		
245	250	255

Ala Ala Arg Phe Cys Ala Glu Ile Lys Ser Pro Lys Tyr Gly Glu Gly  
                   260                  265                  270  
 His Gln Ala Trp Ile Ile Gly Ile Val Glu Lys Gly Asn Arg Thr Ala  
                   275                  280                  285  
 Arg Ile Ile Asp Lys Pro Arg Ile Ile Glu Val Ala Pro Gln Val Ala  
                   290                  295                  300  
 Thr Gln Asn Val Asn Pro Thr Pro Gly Ala Thr Ser  
                   305                  310                  315

<210> 2832

<211> 651

<212> PRT

<213> Homo sapiens

<400> 2832

Met Leu Asp Arg Tyr Glu Tyr Gln Met Ser Ile Ser Ile Val Met Asn  
                   1                  5                  10                  15  
 Ser Val Glu Pro Ser His Lys Ser Thr Gln Arg Pro Pro Pro Pro Gln  
                   20                  25                  30  
 Gly Arg Gln Arg Glu Arg Val Leu Lys Lys Thr Gly His Arg Leu Ser  
                   35                  40                  45  
 Lys Thr Lys Gln Lys Arg Asn Arg Lys Arg Asn Lys Lys Gln Asn Ser  
                   50                  55                  60  
 Gln Asn Arg Ile Met Glu Glu Asn Ser Leu Glu Phe Leu Ser Asp Leu  
                   65                  70                  75                  80  
 Thr Pro Gly Asp Gln Asp Pro Ser Gln Ser Glu Glu Glu Asp Ile Glu  
                   85                  90                  95  
 Lys Thr Arg Arg Glu Ser Glu Tyr Pro Phe Ile Asp Gly Leu Gln Asn

100	105	110
Glu Val Gly Asp Phe Val Thr Gly Tyr Lys Glu Lys Arg Trp Lys Asn		
115	120	125
Lys Asp Pro Lys Asp Ser Phe Gln Asn Val Met Ser Ile Val Glu Leu		
130	135	140
Asp Asn Thr Pro Lys Asn Tyr Leu Ser Lys Glu Gly Asp Asn Leu Phe		
145	150	155
Val Ser Leu Leu Leu Arg Pro Asn Glu Ile Ser Val Thr Cys Pro Ile		
165	170	175
Leu Thr Gln Asn Leu Ser Cys Val Thr Thr Asp Asp Cys Ser Gly Met		
180	185	190
Lys Val Glu Lys His Ile Arg Asn Arg His Thr Ile Ala Leu Asp Thr		
195	200	205
Gln Asp Leu Ser Ala Glu Thr Ser Cys Leu Phe Met Lys Lys Arg Glu		
210	215	220
Ile Val Asp Lys Asn Leu Ser His Glu Pro Ile Leu Cys His Gln His		
225	230	235
Gly Ile Arg Met Ser Asp Lys Val Leu Arg Glu Glu Gln Val Tyr Thr		
245	250	255
Thr Lys Ile Asn His Trp Ala Phe Phe Thr Thr Asn Leu Ser Asp Glu		
260	265	270
Asp Leu Gln Leu Gly Ser Asp Arg Gln Pro Tyr Phe Gly Ser Trp Pro		
275	280	285
Ala Gly Pro His Lys Phe Ile Cys Glu Gln Arg Pro Lys Lys Asp Arg		
290	295	300
Ala Cys Lys Leu Ala Gly Pro Asp Ser Arg Gly Gln Trp Ile Gln Met		
305	310	315
Ile Phe Thr Ser Val Ala Ala Ser Glu Pro Gly Asn Asn Pro Glu Ile		
325	330	335

Leu Thr Asp Lys Leu Leu Ile Gly Asn Glu Asp Phe Ser Pro Pro Pro  
340 345 350  
Glu Thr Met Asp Ser Phe Ile Glu Thr Asn Leu Phe Arg Ser Cys Leu  
355 360 365  
Pro Gln Pro Asp Ile Pro Lys Asn Ala Leu Glu Ser Thr Lys Asn Lys  
370 375 380  
Lys Arg Arg Lys Lys Arg Ile Phe Asn Leu Val Pro Asn Phe Asp Leu  
385 390 395 400  
Leu Gly Gln Ser Arg Ile Gly Val Lys Glu Arg Glu Lys Cys Asp Leu  
405 410 415  
Leu Thr Lys Asn His Gly Leu Lys Ile Thr Leu Gly Glu Glu Lys Asp  
420 425 430  
Arg Ile Ser Glu Arg Asn Ser Glu Glu Glu Asn Lys Gln Lys Leu Met  
435 440 445  
Thr Phe Asp His His Pro Leu Trp Phe Tyr Leu Asp Ile Ile Lys Ala  
450 455 460  
Thr Pro Leu Asn Ile Asp Gly Gln Arg Tyr Ser His Cys Leu Ser Phe  
465 470 475 480  
Asn Arg Leu Arg Cys Ser Ala Ser Leu Tyr Lys Asn Tyr Ile Pro Ser  
485 490 495  
Phe Val Leu His Asn Leu Ser Ser Ile Trp Lys Pro Ser Phe Thr Asn  
500 505 510  
Lys Lys Leu Phe Leu Thr Phe Glu Ser Gln Thr Arg Val Gly Asn Lys  
515 520 525  
Leu Asn Asp Ala Gly Phe Ile Ser Pro Glu Ile Leu His Ser His Pro  
530 535 540  
Asp Thr Ser Cys Ser Leu Gly Val Thr Ser Asp Phe His Phe Leu Asn  
545 550 555 560  
Glu Arg Phe Asp Arg Lys Leu Lys Arg Trp Glu Glu Pro Lys Glu Leu

565	570	575
Pro Ala Glu Asp Ser Gln Asp Leu Thr Ser Thr Asp Tyr Arg Ser Leu		
580	585	590
Glu Leu Pro Leu Ser Gln Gly Phe Ala Phe Gln Leu Val Lys Leu Phe		
595	600	605
Gly Ser Pro Gly Val Pro Met Glu Ser Leu Leu Pro Asp Asp Tyr Val		
610	615	620
Val Pro Leu Asp Trp Lys Thr Leu Lys Met Ile Tyr Leu Gln Trp Lys		
625	630	635
Met Ser Val Glu Lys Arg Gln Lys Lys Ile Gly		640
645	650	

&lt;210&gt; 2833

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

Met Ala Ala Pro Gly Pro Leu Glu Asn Gln Val Val Leu Ala Leu Lys
1                      5                      10                      15
Ala Phe Tyr Asn Leu Phe Pro Ser Leu Leu Leu Thr Ala Thr Ala Pro
20                      25                      30
Ser His His Ser Pro Pro Pro Gly Pro Cys Arg His Val Ala Leu Pro
35                      40                      45
Cys Gly Lys Ala Cys Leu Gln Pro Ala Gly His Ser Ser Thr Ala Pro
50                      55                      60
Ser Leu Ile Ser Phe Pro Lys Asn Val Ile Tyr Asn Ser Thr Leu Asn
65                      70                      75                      80



Pro Ile Ser Pro Pro Phe Phe His Phe Phe Leu Val Ala Ser Phe Ile  
                             85                            90                            95  
 Ser Ile Cys Gln Phe Thr Ser Ser Ile His Ser Leu Ser Tyr Pro Phe  
                             100                            105                            110  
 Leu Val Ala Ala Met Cys Met Arg Gly Leu  
                             115                            120

<210> 2834

<211> 501

<212> PRT

<213> Homo sapiens

<400> 2834

Met Val Phe Phe Cys Pro Val Pro Leu Phe Cys Pro Gly Leu Ala Pro  
     1                            5                            10                            15  
 Arg Asp Pro Arg Pro Cys Ser Phe Leu Pro Pro Val Thr Phe Gly Asn  
                             20                            25                            30  
 Gly Gln Arg Pro Ser Ala Val Leu Gly Gly Pro His Gly His Val Gly  
                             35                            40                            45  
 Asp Pro Ala His Arg Ala Ala Ala Leu Gln Gln Val Trp Arg Pro Glu  
                             50                            55                            60  
 Ile Pro Arg His Leu Gln Gly Asn Pro Pro Leu Leu Thr Pro Pro Cys  
     65                            70                            75                            80  
 Pro Gln Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly Arg Lys  
                             85                            90                            95  
 Met Ser Lys Ser Leu Gly Asn Val Leu Asp Pro Arg Asp Ile Ile Ser  
                             100                            105                            110  
 Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly Asn Leu

115 120 125  
Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys Asp Phe  
130 135 140  
Pro His Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe Thr Leu  
145 150 155 160  
Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val Ser Glu  
165 170 175  
Val Gln Ser Cys Arg His Phe Cys Asn Lys Ile Trp Asn Ala Leu Arg  
180 185 190  
Phe Ile Leu Asn Ala Leu Gly Glu Lys Phe Val Pro Gln Pro Ala Glu  
195 200 205  
Glu Leu Ser Pro Ser Ser Pro Met Asp Ala Trp Ile Leu Ser Arg Leu  
210 215 220  
Ala Leu Ala Ala Gln Glu Cys Glu Arg Gly Phe Leu Thr Arg Glu Leu  
225 230 235 240  
Ser Leu Val Thr His Ala Leu His His Phe Trp Leu His Asn Leu Cys  
245 250 255  
Asp Val Tyr Leu Glu Ala Val Lys Pro Val Leu Trp His Ser Pro Arg  
260 265 270  
Pro Leu Gly Pro Pro Gln Val Leu Phe Ser Cys Ala Asp Leu Gly Leu  
275 280 285  
Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu Trp Gln  
290 295 300  
Arg Leu Pro Pro Arg Pro Gly Cys Pro Pro Ala Pro Ser Ile Ser Val  
305 310 315 320  
Ala Pro Tyr Pro Ser Ala Cys Ser Leu Glu His Trp Arg Gln Pro Glu  
325 330 335  
Leu Glu Arg Arg Phe Ser Arg Val Gln Glu Val Val Gln Val Leu Arg  
340 345 350

Ala Leu Arg Ala Thr Tyr Gln Leu Thr Lys Ala Arg Pro Arg Val Leu  
355 360 365  
Leu Gln Ser Ser Glu Pro Gly Asp Gln Gly Leu Phe Glu Ala Phe Leu  
370 375 380  
Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu Leu Pro  
385 390 395 400  
Pro Gly Thr Ala Ala Pro Ser Gly Trp Ala Gln Ala Pro Leu Ser Asp  
405 410 415  
Thr Ala Gln Val Tyr Met Glu Leu Gln Gly Leu Val Asp Pro Gln Ile  
420 425 430  
Gln Leu Pro Leu Leu Ala Ala Arg Arg Tyr Lys Leu Gln Lys Gln Leu  
435 440 445  
Asp Ser Leu Thr Ala Arg Thr Pro Ser Glu Gly Glu Ala Gly Thr Gln  
450 455 460  
Arg Gln Gln Lys Leu Ser Ser Leu Gln Leu Glu Leu Ser Lys Leu Asp  
465 470 475 480  
Lys Ala Ala Ser His Leu Arg Gln Leu Met Asp Glu Pro Pro Ala Pro  
485 490 495  
Gly Ser Pro Glu Leu  
500

&lt;210&gt; 2835

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2835

Met Ile Phe Leu Thr Ile Ala Leu Ser Phe Ser Gly Ala Ser Tyr His

1	5	10	15
Lys Tyr Pro Asn Ile Phe Ser Asn Val Gln Phe Ile Leu Lys Ala Ser			
20	25	30	
Glu Ile Ile Gly Lys Arg Glu Leu Arg Ser Glu Ser Ile Phe Arg Pro			
35	40	45	
Val Glu Asp Lys Lys Arg Tyr Glu Asn Thr Asp Ser Asp Met Gly Gly			
50	55	60	
Tyr Glu Ile Asn His Leu Leu Trp His Cys Val Ala Ala Trp Ser Cys			
65	70	75	80
Val Gln Asn Asn Ser Pro Gln Leu Asn Asn Val Leu Glu His Leu Ile			
85	90	95	
Phe His Lys Thr Gln Leu Gln Lys Lys Cys Trp Leu Asp Ser Val Leu			
100	105	110	
Ala Leu Leu Val Leu Gly Glu Ala Ala Lys Leu Asn Met Ala Cys Leu			
115	120	125	
Lys Ala Leu Met Asp Val Val Arg Asp Phe Val Ser Ser Ile Met Ser			
130	135	140	
Val Gln Asn Gln Glu Glu Ser Cys Lys Val Asp Gly Phe Ser Trp Ala			
145	150	155	160
Trp Asn Val Val Tyr Ile Tyr Thr Val Ile Leu Ala Glu Ile Cys Leu			
165	170	175	
Tyr Ala Ala Thr Ser Asp Leu Arg Lys Thr Ala Leu Ile Gly Phe Cys			
180	185	190	
His Cys Lys Ser Ser Gln Lys Asn Ile Leu Tyr Leu Asp Lys Ser Val			
195	200	205	
Pro Pro Glu Leu Lys Glu Thr Ser Ile Leu Ser Leu Leu Glu Tyr Phe			
210	215	220	
Ser Ser Lys Met Ser Glu Asn Cys Asp Gln Val Val Trp Thr Gly Tyr			
225	230	235	240

Tyr Gly Leu Val Tyr Asn Leu Val Lys Ile Ser Trp Glu Leu Gln Gly  
                             245                            250                            255  
 Asp Glu Glu Gln Asp Gly Leu Arg Asn Met Ile Trp Gln Thr Leu Gln  
                             260                            265                            270  
 Lys Thr Lys Asp Tyr Glu Glu Asp Val Arg Ile Gln Asn Ala Ile Asn  
                             275                            280                            285  
 Ile Ala Gln Glu Gly Lys Pro Thr Arg Thr Leu Asp Lys Leu Phe Leu  
                             290                            295                            300

<210> 2836

<211> 259

<212> PRT

<213> Homo sapiens

<400> 2836

Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro  
                             1                            5                            10                            15  
 Asp Phe Phe Leu Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val  
                             20                            25                            30  
 Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser  
                             35                            40                            45  
 Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg  
                             50                            55                            60  
 Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe  
                             65                            70                            75                            80  
 Asp Asn Lys Ile Gln Val Lys Pro Val Thr Pro Val Cys Arg Val Pro  
                             85                            90                            95  
 Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys Gln Glu Ser

100	105	110
Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn Asp Val Pro		
115	120	125
Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn Ser Ser Phe		
130	135	140
His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala Val His Lys		
145	150	155
Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp Ala Gly Ser		
165	170	175
Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu Asn Ile Gly		
180	185	190
Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu Ala Leu Ile		
195	200	205
Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe Ile Asn Asn		
210	215	220
Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro Asp Gly Val		
225	230	235
Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His Lys Ser Ser		
245	250	255
Phe Val Ile		

&lt;210&gt; 2837

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2837

Met Met Asn Gly Gly Met Ser Leu Val Ala Phe Val Leu Leu Asn Glu  
 1 5 10 15  
 Cys Val Gly Thr Ala Tyr Trp Ala Leu Ala Gly Ser Ile Gly Gly Leu  
 20 25 30  
 Phe Phe Ala Val Gly Ile Ala Gln Tyr Ala Leu Leu Gly Tyr Phe Ile  
 35 40 45  
 Arg Ser Trp Arg Thr Leu Ala Ile Leu Val Asn Leu Gln Gly Thr Val  
 50 55 60  
 Val Phe Leu Leu Ser Leu Phe Ile Pro Glu Ser Pro Arg Trp Leu Tyr  
 65 70 75 80  
 Ser Gln Gly Arg Leu Ser Glu Ala Glu Glu Ala Leu Tyr Leu Ile Ala  
 85 90 95  
 Lys Arg Asn Arg Lys Leu Lys Cys Thr Phe Ser Leu Thr His Pro Ala  
 100 105 110  
 Asn Arg Ser Cys Arg Glu Thr Gly Ser Phe Leu Asp Leu Phe Arg Tyr  
 115 120 125  
 Arg Val Leu Leu Gly His Thr Leu Ile Leu Met Phe Ile Trp Phe Val  
 130 135 140  
 Cys Ser Leu Val Tyr Tyr Gly Leu Thr Leu Ser Ala Gly Asp Leu Gly  
 145 150 155 160  
 Gly Ser Ile Tyr Ala Asn Leu Ala Leu Ser Gly Leu Ile Glu Ile Pro  
 165 170 175  
 Ser Tyr Pro Leu Cys Ile Tyr Leu Ile Asn Gln Lys Trp Phe Gly Arg  
 180 185 190  
 Lys Arg Thr Leu Ser Ala Phe Leu Cys Leu Gly Gly Leu Ala Cys Leu  
 195 200 205  
 Ile Val Met Phe Leu Pro Glu Lys Lys Asp Thr Gly Val Phe Ala Val  
 210 215 220  
 Val Asn Ser His Ser Leu Ser Leu Leu Gly Lys Leu Thr Ile Ser Ala

225                      230                      235                      240  
Ala Phe Asn Ile Val Tyr Ile Tyr Thr Ser Glu Leu Tyr Pro Thr Val  
                         245                      250                      255  
Ile Arg Asn Val Gly Leu Gly Thr Cys Ser Met Phe Ser Arg Val Gly  
                         260                      265                      270  
Gly Ile Ile Ala Pro Phe Ile Pro Ser Leu Lys Tyr Val Gln Trp Ser  
                         275                      280                      285  
Leu Pro Phe Ile Val Phe Gly Ala Thr Gly Leu Thr Ser Gly Leu Leu  
                         290                      295                      300  
Ser Leu Leu Leu Pro Glu Thr Leu Asn Ser Pro Leu Leu Glu Thr Phe  
305                      310                      315                      320  
Ser Asp Leu Gln Val Tyr Ser Tyr Arg Arg Leu Gly Glu Glu Ala Leu  
                         325                      330                      335  
Ser Leu Gln Ala Leu Asp Pro Gln Gln Cys Val Asp Lys Glu Ser Ser  
                         340                      345                      350  
Leu Gly Ser Glu Ser Glu Glu Glu Glu Glu Phe Tyr Asp Ala Asp Glu  
                         355                      360                      365  
Glu Thr Gln Met Ile Lys  
                         370

&lt;210&gt; 2838

&lt;211&gt; 383

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2838

Met Asn Ala Gly Pro Ser Trp Asn Lys Val Gln His Ser Lys Asn Ser

1

5

10

15



Ser Gly Lys Arg Gln Ser Lys Ser Gln Val Pro His Ala Ser Ser Gln  
 20 25 30  
 Pro Arg Ser Ser Leu Thr Ala Val Thr Gln Pro Thr Glu Glu Lys Leu  
 35 40 45  
 Lys Glu Ser Ile Ser Pro Glu Ala Arg Arg Lys Arg Asn Pro Leu Gly  
 50 55 60  
 Ser Arg Cys Gln Gly Ala Ser Gly Asn Lys Leu Phe Leu Asp Phe Gln  
 65 70 75 80  
 Ser Met Lys Ile Ile Lys Glu Asn Ala Asp Glu Asp Ser Ala Ser Asp  
 85 90 95  
 Leu Ser Asp Ser Glu Arg Ile Pro Ile Pro Pro Ser Pro Leu Thr Pro  
 100 105 110  
 Pro Asp Leu Asn Leu Arg Ala Glu Glu Ile Asp Pro Val Tyr Phe Asp  
 115 120 125  
 Leu His Pro Gly Gln Gly His Thr Lys Pro Glu Tyr Tyr Tyr Pro Asn  
 130 135 140  
 Phe Leu Pro Ser Pro Phe Ser Ser Trp Asp Leu Arg Asp Met Ala Leu  
 145 150 155 160  
 Leu Leu Asn Ala Glu Asn Lys Thr Glu Ala Val Pro Arg Val Gly Gly  
 165 170 175  
 Leu Leu Gly Lys Tyr Ile Asp Arg Leu Ile Gln Leu Glu Trp Leu Gln  
 180 185 190  
 Val Gln Thr Val Gln Cys Glu Lys Ala Lys Gly Gly Lys Ala Arg Pro  
 195 200 205  
 Pro Thr Ala Pro Gly Thr Ser Gly Ala Leu Lys Ser Pro Gly Arg Ser  
 210 215 220  
 Lys Leu Ile Ala Ser Ala Leu Ser Lys Pro Leu Pro His Gln Glu Gly  
 225 230 235 240  
 Ala Ser Lys Ser Gly Pro Ser Arg Lys Lys Ala Phe His His Glu Glu

	245		250		255
Ile His Pro Ser His Tyr Ala Phe Glu Thr Ser Pro Arg Pro Ile Asp					
	260		265		270
Val Leu Gly Gly Thr Arg Phe Cys Ser Gln Arg Gln Thr Leu Glu Met					
	275		280		285
Arg Thr Glu Glu Lys Lys Lys Lys Ser Ser Lys Ser Thr Lys Leu Gln					
	290		295		300
Arg Trp Asp Leu Ser Gly Ser Gly Ser Ser Ser Lys Val Glu Thr Ser					
305		310		315	320
Gly His Ile Arg Val Pro Lys Gln Ala Ala Val Ile Leu Asp Ser Ala					
	325		330		335
Asp Ser Cys Lys Ala Ser Lys Thr Gln Ala His Ala His Pro Arg Lys					
	340		345		350
Lys Gly Lys Ala Glu Ser Cys Gly His Ala Thr Val Ser Ser Glu Lys					
	355		360		365
Lys Leu Lys Thr Asn Gly Val Lys Gln Asn Thr Tyr Lys Leu Lys					
	370		375		380

&lt;210&gt; 2839

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2839

Met Lys Gly Cys Cys Arg Pro Val Gly Arg Thr Ser Ala Pro Pro Arg			
1	5	10	15
Pro Gly Pro Arg Pro Ser Ser Ser Gly Leu Ser Cys Cys Pro Cys Leu			
20	25	30	

Arg Gly Pro Thr Thr Arg Arg Thr Gly Ser Cys Ala Gln Pro Arg Ser  
 35 40 45  
 Pro Pro Ser Phe Arg Gly Pro Gly Leu Asp Pro Ala Glu Pro Gln Met  
 50 55 60  
 Cys Glu Gln Glu Arg Gln Ser Pro Asp Ala Arg Pro Ala Gly Ser Gly  
 65 70 75 80  
 Arg Glu Met Val Pro Ser Phe Cys Pro Glu Gly Glu Pro Cys Thr Glu  
 85 90 95  
 Gly Pro Leu Arg Ala Trp His Cys Leu Pro Asn Ser Pro Ser Ala Ser  
 100 105 110  
 Leu Pro Gly Trp Ala Met Arg Gly Leu Asp Arg Ile Ala Leu Val Pro  
 115 120 125  
 Ser Trp Gln Trp Val Trp Val Gly Ser Trp Gly Gln Gly Phe Pro Glu  
 130 135 140  
 Cys Arg Gln Leu Gly Leu His Leu Pro Arg Pro Pro Thr Gln Ala Gln  
 145 150 155 160  
 Ile Ser Arg Ala

&lt;210&gt; 2840

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2840

Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met  
 1 5 10 15  
 Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu

20	25	30	
Ile Gln Val Gln Ala Thr Val Val Gly Phe Leu Thr Ser Ile Ala Ala			
35	40	45	
Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala			
50	55	60	
Phe Leu Leu Cys Ala Ser Ser Val Ala Thr Ala Phe Ile Ala Ser Leu			
65	70	75	80
Val Leu Gly Met Ile Met Ile Gly Val Ile Ile Gly Ser Arg Lys Ile			
85	90	95	
Gly Ile Asn Pro Asp Asn Val Ala Thr Pro Ile Ala Ala Ser Leu Gly			
100	105	110	
Asp Leu Ile Thr Leu Ala Leu Leu Ser Gly Ile Ser Trp Gly Leu Tyr			
115	120	125	
Leu Glu Leu Asn His Trp Arg Tyr Ile Tyr Pro Leu Val Cys Ala Phe			
130	135	140	
Phe Val Ala Leu Leu Pro Val Trp Val Val Leu Ala Arg Arg Ser Pro			
145	150	155	160
Ala Thr Arg Glu Val Leu Tyr Ser Gly Trp Glu Pro Val Ile Ile Ala			
165	170	175	
Met Ala Ile Ser Ser Val Gly Gly Leu Ile Leu Asp Lys Thr Val Ser			
180	185	190	
Asp Pro Asn Phe Ala Gly Met Ala Val Phe Thr Pro Val Ile Asn Gly			
195	200	205	
Val Gly Gly Asn Leu Val Ala Val Gln Ala Ser Arg Ile Ser Thr Phe			
210	215	220	
Leu His Met Asn Gly Met Pro Gly Glu Asn Ser Glu Gln Ala Pro Arg			
225	230	235	240
Arg Cys Pro Ser Pro Cys Thr Thr Phe Phe Ser Pro Asp Val Asn Ser			
245	250	255	

Arg Ser Ala Arg Val Leu Phe Leu Leu Val Val Pro Gly His Leu Val  
 260 265 270  
 Phe Leu Tyr Thr Ile Ser Cys Met Gln Gly Gly His Thr Thr Leu Thr  
 275 280 285  
 Leu Ile Phe Ile Ile Phe Tyr Met Thr Ala Ala Leu Leu Gln Val Leu  
 290 295 300  
 Ile Leu Leu Tyr Ile Ala Asp Trp Met Val His Trp Met Trp Gly Arg  
 305 310 315 320  
 Gly Leu Asp Pro Asp Asn Phe Ser Ile Pro Tyr Leu Thr Ala Leu Gly  
 325 330 335  
 Asp Leu Leu Gly Thr Gly Leu Leu Ala Leu Ser Phe His Val Leu Trp  
 340 345 350  
 Leu Ile Gly Asp Arg Asp Thr Asp Val Gly Asp  
 355 360

<210> 2841

<211> 138

<212> PRT

<213> Homo sapiens

<400> 2841

Met Arg Leu Trp Ser His Leu Leu Gly Arg Leu Arg His Glu Asn His  
 1 5 10 15  
 Leu Asp Leu Gly Gly Arg Gly Cys Ser Glu Leu Arg Ser Arg His Cys  
 20 25 30  
 Thr Leu Ala Trp Glu Thr Glu Arg Asp Ser Val Ser Lys Lys Lys Lys  
 35 40 45  
 Lys Lys Lys Val Ser Ile Pro Leu Phe Leu Trp Gly Phe Arg Val Thr

50                      55                      60  
 Tyr Trp Glu Asn Gly Glu Ile Leu Ala Leu Met Glu Ser Phe Pro Asp  
 65                      70                      75                      80  
 Leu Ser Val Lys Ser Gln Thr Gln Gln Glu Leu Gln Phe Leu Ala Arg  
                     85                      90                      95  
 Ala Leu Ala Phe Ala Lys Ala Gly Pro Arg Leu Trp Ser His Gly Phe  
                     100                      105                      110  
 Ser His Lys Glu Arg Glu Arg Ile Cys Gly Gln Lys Ile Gly Lys Arg  
                     115                      120                      125  
 Gly Arg Lys Ile Arg Phe Leu Arg Leu Gln  
                     130                      135

<210> 2842

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2842

Met Lys Asn Leu Thr Leu Glu Arg Asn Pro Met Ser Val Ser Asn Val  
 1                      5                      10                      15  
 Val Lys Pro Leu Phe Leu Ser Leu Pro Phe His Ile Met Lys Gly Leu  
                     20                      25                      30  
 Thr Leu Glu Arg Asn Pro Met Ser Val Ser Asn Val Glu Lys Pro Ser  
                     35                      40                      45  
 Asp Leu Pro His Thr Phe Glu Asn Met Val Gly Leu Thr Leu Glu Arg  
                     50                      55                      60  
 Asn Pro Met Asn Val Ser Asn Val Gly Lys Pro Ser Asp Leu Ser Lys  
 65                      70                      75                      80

Ile Val Glu Phe Met Lys Gly His Thr Leu Glu Arg Asn Pro Val Asn  
                     85                    90                    95  
 Val Arg Asn Val Gly Lys Arg Ser Ile Ile Ser Leu Leu Cys Lys Tyr  
                     100                    105                    110  
 Met Lys Gly Cys Thr Glu Glu Arg Ser Ser Val Asn Val Ser Ile Val  
                     115                    120                    125  
 Gly Lys His Ser Tyr Leu Pro Arg Ser Phe Glu Tyr Met Gln Glu His  
                     130                    135                    140  
 Thr Met Glu Arg Asn Pro Met Asn Val Lys Asn Ala Glu Lys His Ser  
                     145                    150                    155                    160  
 Ala Cys Leu Leu Pro Phe Ile Asp Met Lys Arg His Trp Lys Glu Thr  
                     165                    170                    175  
 Leu

<210> 2843

<211> 127

<212> PRT

<213> Homo sapiens

<400> 2843

Met Leu Glu Phe Arg Ala Lys Val Leu Gln Val Phe Leu Arg Arg Thr  
           1                    5                    10                    15  
 Leu Thr Cys Gln Trp Gln Ser His Thr Pro Gly Thr Tyr Leu Ala Glu  
                     20                    25                    30  
 Glu Cys Leu Phe Arg His Ile Asn Ile Phe Ala Tyr Ser Met Leu Val  
                     35                    40                    45  
 Asn Lys Pro Phe His Lys Gly Ser Leu Arg Thr Ser Asp Phe Lys Gly

50                      55                      60  
 Lys Lys Phe Ile Ile Gln Thr Gly Ser Arg Gly Phe Thr Ile Gln Arg  
 65                      70                      75                      80  
 Leu Ser Cys Ile Trp Leu Val Leu Trp Ala Trp Ser Val Asp His Val  
                          85                      90                      95  
 Leu Ile Phe Ser Ile Lys Ile Arg Thr Ala Leu Gly Arg Pro Arg Ile  
                          100                      105                      110  
 Tyr Ser Ile Cys Gly Ser Leu Ala Glu Ser Arg Asp Pro Gln Pro  
                          115                      120                      125

<210> 2844

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2844

Met Arg Ala Ala Ser Ser Gln Cys Ile Leu Cys Ser Ser Ile Pro Asp  
 1                      5                      10                      15  
 Gln Pro Gln Gly Leu Pro Ala Glu Pro Leu Gln His Pro Ala Arg Trp  
                          20                      25                      30  
 Glu Arg Gly His Arg Leu Pro Gly Pro Gly Leu Leu Pro Pro Gly Ala  
                          35                      40                      45  
 Thr Gln Cys Asp Leu Glu Arg Lys Arg Thr Gly Arg Asp Arg Gln Glu  
                          50                      55                      60  
 Leu Pro Thr Gln Pro Gly Cys Leu Arg Gly Pro Val His His Glu Gln  
 65                      70                      75                      80  
 Pro Ala Asp Pro Ala Gly His Thr Val Pro Ser Arg Gln Val Arg Asp  
                          85                      90                      95



Met Pro Arg Glu Ala Leu His Glu Ser Gln Pro Gly Cys Asp Cys Ala  
 100 105 110  
 Leu Pro Ser Ser Leu Asn Ser Thr Tyr Pro Ile Ser Leu Asn Ser Thr  
 115 120 125  
 Tyr Pro Ile Ser Leu Met Leu Pro Pro Pro Thr Val Thr Ala Pro Thr  
 130 135 140  
 Gly Pro Arg Gly Pro Ala Leu Arg Phe Arg Ser Glu Pro His Val His  
 145 150 155 160  
 Thr Asp Arg Pro Glu Arg Cys Leu Arg Cys His Leu His Leu Asp Ala  
 165 170 175  
 Leu Lys Trp Glu Glu Arg Cys Ser Arg Thr Thr  
 180 185

<210> 2845

<211> 215

<212> PRT

<213> Homo sapiens

<400> 2845

Met Arg Gly Leu Arg Trp Arg Tyr Thr Arg Leu Pro Ser Gln Val Glu  
 1 5 10 15  
 Asp Thr Leu Ser Gly Glu Glu Gly Asn Glu Glu Glu Glu Glu Glu  
 20 25 30  
 Ala Ala Pro Asp Pro Ala Ala Ala Pro Glu Asp Pro Thr Val Pro Gln  
 35 40 45  
 Leu Thr Glu Ala Ser Gln Val Leu Ser Ala Ser Glu Ile Arg Gln Leu  
 50 55 60  
 Ser Phe His Phe Pro Pro Arg Val Thr Gly His Pro Trp Ser Leu Val

65                      70                      75                      80  
Phe Cys Thr Ser Arg Asp Gly Phe Ser Leu Gln Ser Leu Tyr Arg Arg  
                         85                      90                      95  
Met Glu Gly Cys Ser Gly Pro Val Leu Leu Val Leu Arg Asp Gln Asp  
                         100                      105                      110  
Gly Gln Ile Phe Gly Ala Phe Ser Ser Ser Ala Ile Arg Leu Ser Lys  
                         115                      120                      125  
Gly Phe Tyr Gly Thr Gly Glu Thr Phe Leu Phe Ser Phe Ser Pro Gln  
                         130                      135                      140  
Leu Lys Val Phe Lys Trp Thr Gly Ser Asn Ser Phe Phe Val Lys Gly  
145                      150                      155                      160  
Asp Leu Asp Ser Leu Met Met Gly Ser Gly Ser Gly Arg Phe Gly Leu  
                         165                      170                      175  
Trp Leu Asp Gly Asp Leu Phe Arg Gly Gly Ser Ser Pro Cys Pro Thr  
                         180                      185                      190  
Phe Asn Asn Glu Val Leu Ala Arg Gln Glu Gln Phe Cys Ile Gln Glu  
                         195                      200                      205  
Leu Glu Ala Trp Leu Leu Ser  
                         210                      215

&lt;210&gt; 2846

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2846

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp  
1                      5                      10                      15

Val Leu Ser Gln Met Gln Leu Gln Glu Ser Gly Pro Gly Val Val Lys  
 20 25 30  
 Pro Ser Glu Thr Leu Ser Leu Lys Cys Ser Val Ser Gly Gly Ser Leu  
 35 40 45  
 Ser Gly Leu His Trp Val Trp Val Arg Gln Pro Pro Gly Lys Gly Leu  
 50 55 60  
 Glu Trp Ile Gly His Thr Tyr Phe Gly Arg Pro Asn Thr Tyr Ser Pro  
 65 70 75 80  
 Ser Leu Arg Ser Arg Val Thr Ile Ser Val Asp Thr Ala Glu Asn Gln  
 85 90 95  
 Ile Ser Leu Glu Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr  
 100 105 110  
 Phe Cys Val Gly Leu Phe Glu Gly Leu Gly Gly Arg Gly Phe Trp Gly  
 115 120 125  
 Gln Gly Val Leu Val Thr Val Ser Pro Ala Ser Pro Thr Ser Pro Lys  
 130 135 140  
 Val Phe Pro Leu Ser Leu Asp Ser Thr Pro Gln Asp Gly Asn Val Val  
 145 150 155 160  
 Val Ala Cys Leu Val Gln Gly Phe Phe Pro Gln Glu Pro Leu Ser Val  
 165 170 175  
 Thr Trp Ser Glu Ser Gly Gln Asn Val Thr Ala Arg Asn Phe Pro Pro  
 180 185 190  
 Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr Ser Ser Gln Leu Thr  
 195 200 205  
 Leu Pro Ala Thr Gln Cys Pro Asp Gly Lys Ser Val Thr Cys His Val  
 210 215 220  
 Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr Val Pro Cys Pro Val  
 225 230 235 240  
 Pro Pro Pro Pro Pro Cys Cys His Pro Arg Leu Ser Leu His Arg Pro

245	250	255
Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn Leu Thr Cys Thr		
260	265	270
Leu Thr Gly Leu Arg Asp Ala Ser Gly Ala Thr Phe Thr Trp Thr Pro		
275	280	285
Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Glu Arg Asp Leu Cys		
290	295	300
Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Gln Pro Trp		
305	310	315
320	325	330
Asn His Gly Glu Thr Phe Thr Cys Thr Ala Ala His Pro Glu Leu Lys		
335	340	345
Thr Pro Leu Thr Ala Asn Ile Thr Lys Ser Gly Asn Thr Phe Arg Pro		
350	355	360
Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu		
365	370	375
Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp Val		
380	385	390
Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr		
395	400	405
Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe		
410	415	420
Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly		
425	430	435
Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe		
440	445	450
Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn		
455	460	465
Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr		
470	475	

&lt;210&gt; 2847

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2847

Met Val Tyr Glu Val Pro Gly Gln Asp Leu Glu Val Asp Leu Tyr Asp

1 5 10 15

Glu Asp Thr Asp Arg Asp Asp Phe Leu Gly Ser Leu Gln Ile Cys Leu

20 25 30

Gly Asp Val Met Thr Asn Arg Val Val Asp Glu Trp Phe Val Leu Asn

35 40 45

Asp Thr Thr Ser Gly Arg Leu His Leu Arg Leu Glu Trp Leu Ser Leu

50 55 60

Leu Thr Asp Gln Glu Val Leu Thr Glu Asp His Gly Gly Leu Ser Thr

65 70 75 80

Ala Ile Leu Val Val Phe Leu Glu Ser Ala Cys Asn Leu Pro Arg Asn

85 90 95

Pro Phe Asp Tyr Leu Asn Gly Glu Tyr Arg Ala Lys Lys Leu Ser Arg

100 105 110

Phe Ala Arg Asn Lys Val Ser Lys Asp Pro Ser Ser Tyr Val Lys Leu

115 120 125

Ser Val Gly Lys Lys Thr His Thr Ser Lys Thr Cys Pro His Asn Lys

130 135 140

Asp Pro Val Trp Ser Gln Val Phe Ser Phe Phe Val His Asn Val Ala

145 150 155 160

Thr Glu Arg Leu His Leu Lys Val Leu Asp Asp Asp Gln Glu Cys Ala

	165		170		175
Leu Gly Met	Leu Glu Val	Pro Leu Cys	Gln Ile Leu	Pro Tyr Ala	Asp
	180		185		190
Leu Thr Leu	Glu Gln Arg	Phe Gln Leu	Asp His Ser	Gly Leu Asp	Ser
	195		200		205
Leu Ile Ser	Met Arg Leu	Val Leu Arg	Phe Leu Gln	Gly Arg Asn	Glu
	210		215		220
Ser Trp Gly	Ala His Thr	Gln Asp Leu	Lys Pro		
	225		230		235

&lt;210&gt; 2848

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

Met Leu Arg	Ala Ala Leu	Pro Ala Leu	Leu Leu Pro	Leu Leu Gly	Leu
1	5	10	15		
Ala Ala Ala	Ala Val Ala	Gly Lys Pro	Leu Arg Ser	Pro Ser Pro	Gly
	20	25	30		
Pro Cys Ala	Thr Ala Phe	Ala Pro Phe	Pro Thr His	Ala Leu Arg	Pro
	35	40	45		
Arg Ala Pro	Glu Gly Gly	Pro Gln Thr	Gln His Pro	Ala Gly His	Pro
	50	55	60		
Ala Leu Pro	Cys Thr Pro	Val Pro Arg	Gly Ser Trp	Leu Arg Val	Thr
	65	70	75	80	
Ser His Pro	Pro Ala Leu	Gly Glu Gly	Arg Trp Pro	Arg Ile Arg	Glu
	85	90	95		

Gly Ser Val Phe Leu Gly Val His Ile Leu Thr Ala Asp Pro Thr Pro  
 100 105 110  
 Arg Gly Gly Asn Pro Gln Ile Arg Pro Val Gly Arg Arg Thr Glu Gly  
 115 120 125  
 Leu Gly Val Ala Arg Arg Ala Pro Phe Gln Gly Asn Phe Gly Leu Lys  
 130 135 140

<210> 2849

<211> 629

<212> PRT

<213> Homo sapiens

<400> 2849

Met Leu Arg Met Val Ser Ala Val Leu Gln Phe Gly Asn Ile Ala Leu  
 1 5 10 15  
 Lys Arg Glu Arg Asn Thr Asp Gln Ala Thr Met Pro Asp Asn Thr Ala  
 20 25 30  
 Ala Gln Lys Leu Cys Arg Leu Leu Gly Leu Gly Val Thr Asp Phe Ser  
 35 40 45  
 Arg Ala Leu Leu Thr Pro Arg Ile Lys Val Gly Arg Asp Tyr Val Gln  
 50 55 60  
 Lys Ala Gln Thr Lys Glu Gln Ala Asp Phe Ala Leu Glu Ala Leu Ala  
 65 70 75 80  
 Lys Ala Thr Tyr Glu Arg Leu Phe Arg Trp Leu Val Leu Arg Leu Asn  
 85 90 95  
 Arg Ala Leu Asp Arg Ser Pro Arg Gln Gly Ala Ser Phe Leu Gly Ile  
 100 105 110  
 Leu Asp Ile Ala Gly Phe Glu Ile Phe Gln Leu Asn Ser Phe Glu Gln

115 120 125  
Leu Cys Ile Asn Tyr Ala Asn Glu Lys Leu Gln Gln Leu Phe Asn His  
130 135 140  
Thr Met Phe Val Leu Glu Gln Glu Glu Tyr Gln Arg Glu Gly Ile Pro  
145 150 155 160  
Trp Thr Phe Leu Asp Phe Gly Leu Asp Leu Gln Pro Cys Ile Asp Leu  
165 170 175  
Ile Glu Arg Pro Ala Asn Pro Pro Gly Leu Leu Ala Leu Leu Asp Glu  
180 185 190  
Glu Cys Trp Phe Pro Lys Ala Thr Asp Lys Ser Phe Val Glu Lys Val  
195 200 205  
Ala Gln Glu Gln Gly Gly His Pro Lys Phe Gln Arg Pro Arg His Leu  
210 215 220  
Arg Asp Gln Ala Asp Phe Ser Val Leu His Tyr Ala Gly Lys Val Asp  
225 230 235 240  
Tyr Lys Ala Asn Glu Trp Leu Met Lys Asn Met Asp Pro Leu Asn Asp  
245 250 255  
Asn Val Ala Ala Leu Leu His Gln Ser Thr Asp Arg Leu Thr Ala Glu  
260 265 270  
Ile Trp Lys Asp Val Glu Gly Ile Val Gly Leu Glu Gln Val Ser Ser  
275 280 285  
Leu Gly Asp Gly Pro Pro Gly Gly Arg Pro Arg Arg Gly Met Phe Arg  
290 295 300  
Thr Val Gly Gln Leu Tyr Lys Glu Ser Leu Ser Arg Leu Met Ala Thr  
305 310 315 320  
Leu Ser Asn Thr Asn Pro Ser Phe Val Arg Cys Ile Val Pro Asn His  
325 330 335  
Glu Lys Arg Ala Gly Lys Leu Glu Pro Arg Leu Val Leu Asp Gln Leu  
340 345 350



Arg Cys Asn Gly Val Leu Glu Gly Ile Arg Ile Cys Arg Gln Gly Phe  
355 360 365

Pro Asn Arg Ile Leu Phe Gln Glu Phe Arg Gln Arg Tyr Glu Ile Leu  
370 375 380

Thr Pro Asn Ala Ile Pro Lys Gly Phe Met Asp Gly Lys Gln Ala Cys  
385 390 395 400

Glu Lys Met Ile Gln Ala Leu Glu Leu Asp Pro Asn Leu Tyr Arg Val  
405 410 415

Gly Gln Ser Lys Ile Phe Phe Arg Ala Gly Val Leu Ala Gln Leu Glu  
420 425 430

Glu Glu Arg Asp Leu Lys Val Thr Asp Ile Ile Val Ser Phe Gln Ala  
435 440 445

Ala Ala Arg Gly Tyr Leu Ala Arg Arg Ala Phe Gln Lys Arg Gln Gln  
450 455 460

Gln Gln Ser Ala Leu Arg Val Met Gln Arg Asn Cys Ala Ala Tyr Leu  
465 470 475 480

Lys Leu Arg His Trp Gln Trp Trp Arg Leu Phe Thr Lys Val Lys Pro  
485 490 495

Leu Leu Gln Val Thr Arg Gln Asp Glu Val Leu Gln Ala Arg Ala Gln  
500 505 510

Glu Leu Gln Lys Val Gln Glu Leu Gln Gln Gln Ser Ala Arg Glu Val  
515 520 525

Gly Glu Leu Gln Gly Arg Val Ala Gln Leu Glu Glu Glu Arg Ala Arg  
530 535 540

Leu Ala Glu Gln Leu Arg Ala Glu Ala Glu Leu Cys Ala Glu Ala Glu  
545 550 555 560

Glu Thr Arg Gly Arg Leu Ala Ala Arg Lys Gln Glu Leu Glu Leu Val  
565 570 575

Val Ser Glu Leu Glu Ala Arg Val Gly Glu Glu Glu Glu Cys Ser Arg

580                      585                      590  
 Gln Met Gln Thr Glu Lys Lys Arg Leu Gln Gln His Ile Gln Glu Leu  
 595                      600                      605  
 Glu Ala His Leu Glu Ala Glu Glu Gly Ala Arg Gln Lys Leu Gln Leu  
 610                      615                      620  
 Glu Lys Val Thr Thr  
 625

<210> 2850

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2850

Met Gly Ser Asp Cys Glu Ser His Lys His Ser Pro Leu Asn Pro Asn  
 1                      5                      10                      15  
 Ile Thr Gln Leu Pro Phe Ser Trp Val Pro Lys Met Pro Met Asp Thr  
 20                      25                      30  
 Ser Phe Leu Pro Tyr Val Lys Val Thr Glu Val Glu Gly Lys Glu Phe  
 35                      40                      45  
 Gly Ile Glu Asn Asp Lys Asp Leu Arg Arg Leu Pro Leu Lys Tyr Leu  
 50                      55                      60  
 Pro Leu Glu Met Tyr Lys Asn Gly Pro Gly Thr Val Ala His Thr Cys  
 65                      70                      75                      80  
 Asn Pro Asn Thr Leu Gly Gly Arg Gly Arg Trp Ile Thr Arg Ser Gly  
 85                      90                      95  
 Glu Gln Asp His Pro Gly  
 100

&lt;210&gt; 2851

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2851

Met Glu Leu Ser Leu Ser Trp Phe Phe Leu Leu Thr Ile Ile Gln Gly  
1 5 10 15  
Val Gln Cys Glu Gln Gln Leu Val Gln Ser Ala Gly Gly Leu Val Gln  
20 25 30  
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe  
35 40 45  
Glu Asn His Ala Met His Trp Val Arg Gln Val Pro Gly Lys Arg Leu  
50 55 60  
Glu Trp Val Ser Gly Ile Asp Trp Asn Gly Gly Asp Ala Gly Tyr Ala  
65 70 75 80  
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys  
85 90 95  
Ser Leu Tyr Leu Gln Met Ser Ser Leu Arg Pro Asp Asp Ser Ala Phe  
100 105 110  
Tyr Phe Cys Ala Arg Asp Thr Val Ser Gly Trp Met Asp Trp Ser Phe  
115 120 125  
Asp Leu Trp Gly Arg Gly Thr Leu Val Ser Val Ser Ser Ala Ser Pro  
130 135 140  
Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro Asp  
145 150 155 160  
Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro Gln Glu

165	170	175
Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr Ala Arg		
180	185	190
Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr Ser		
195	200	205
Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly Lys Ser Val		
210	215	220
Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr Val		
225	230	235
240		
Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Thr Pro		
245	250	255
Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser Leu His Arg		
260	265	270
Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn Leu Thr Cys		
275	280	285
Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe Thr Trp Thr		
290	295	300
Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Asp Arg Asp Leu		
305	310	315
320		
Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Glu Pro		
325	330	335
Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser		
340	345	350
Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg		
355	360	365
Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn		
370	375	380
Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp		
385	390	395
400		

Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys

405

410

415

Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr

420

425

430

Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys

435

440

445

Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala

450

455

460

Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val

465

470

475

480

Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr

485

490

<210> 2852

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2852

Met Arg Thr Pro Val Val Met Thr Leu Gly Met Val Leu Ala Pro Cys

1

5

10

15

Gly Leu Leu Leu Asn Leu Thr Gly Thr Pro Val Thr Val Gln Val Ser

20

25

30

Tyr Ser Leu Val Leu Gly Tyr Leu Gly Ser Cys Leu Leu Leu Gly

35

40

45

Gly Phe Ser Leu Ala Leu Ser Phe Ala Pro Trp Cys Asp Glu Arg Cys

50

55

60

Arg Arg Arg Arg Lys Gly Pro Ser Ala Gly Pro Arg Arg Ser Ser Val

65                      70                      75                      80  
 Ser Thr Ile Gln Val Glu Trp Pro Glu Pro Asp Leu Ala Pro Ala Ile  
                          85                      90                      95  
 Lys Tyr Tyr Ser Asp Gly Gln His Arg Pro Pro Pro Ala Gln His Arg  
                          100                      105                      110  
 Lys Pro Lys Pro Lys Pro Lys Val Gly Phe Pro Met Pro Arg Pro Arg  
                          115                      120                      125  
 Pro Lys Ala Tyr Thr Asn Ser Val Asp Val Leu Asp Gly Glu Gly Trp  
                          130                      135                      140  
 Glu Ser Gln Asp Ala Pro Ser Cys Ser Thr His Pro Cys Asp Ser Ser  
 145                      150                      155                      160  
 Leu Pro Cys Asp Ser Asp Leu  
                          165

&lt;210&gt; 2853

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2853

Met Trp Arg Gly Ile Asp Ser Ile Tyr Pro Tyr Glu Ser Trp Ser Leu  
   1                      5                      10                      15  
 Thr Leu Leu Ser Arg Leu Glu Phe Ser Gly Arg Ile Met Ala Tyr Cys  
                          20                      25                      30  
 Ser Leu Glu Leu Leu Gly Ser Asn His Pro Pro Thr Ser Ala Phe Cys  
                          35                      40                      45  
 Cys Arg Arg Ile Phe Cys Leu Leu Glu Pro Ala Val Ser Thr Gln Glu  
                          50                      55                      60

Trp Lys Phe Ser Gln Lys Met Gln His Thr Val Lys Ile Ser Gly Asp  
 65                      70                      75                      80  
 Ala Ser Thr Lys Ala His Arg Gly Val Lys Ser Val Ile Thr Phe Phe  
                     85                      90                      95  
 Leu Leu Tyr Ala Ile Phe Ser Leu Ser Phe Phe Ile Ser Val Trp Thr  
                     100                      105                      110  
 Ser Glu Arg Leu Glu Glu Asn Leu Ile Ile Leu Ser Gln Val Met Gly  
                     115                      120                      125  
 Met Ala Tyr Pro Ser Cys His Ser Cys Val Leu Ile Leu Gly Asn Lys  
                     130                      135                      140  
 Lys Leu Arg Gln Ala Ser Leu Ser Val Leu Leu Trp Leu Arg Tyr Met  
 145                      150                      155                      160  
 Phe Lys Asp Gly Glu Pro Ser Gly His Lys Glu Phe Arg Glu Ser Ser  
                     165                      170                      175

<210> 2854

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2854

Met Gly His Glu Pro Cys Gly Pro Cys Asp Gly Pro Ser Val Thr Leu  
 1                      5                      10                      15  
 Gln His Gly Ser Cys Pro Leu Gly Leu His Pro Ser Thr Gly Thr Pro  
                     20                      25                      30  
 Ala Met Ala Ile Arg Gly Thr Ala Arg Gly Thr Cys Trp Met Ser Pro  
                     35                      40                      45  
 Ser Gln Pro Phe Pro Ser Pro Pro Gly Leu Thr Pro Ala Pro Glu Ala

50                      55                      60  
 Leu Pro Pro Thr Trp Pro Lys Ala Pro Leu Ser Leu Arg Leu Arg Phe  
 65                      70                      75                      80  
 Pro Phe Val Phe Gly Asn Pro Val Gly Ser His Leu Ala Ser Pro Trp  
 85                      90                      95  
 His Ser Trp Gly Asp  
 100

<210> 2855

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2855

Met Phe His Cys Phe Ile Trp Leu Ser Leu His Gln Tyr Gln Ile Phe  
 1                      5                      10                      15  
 Leu Ile Ile Val Ala Leu His Cys Ser Gly Ile Gln Trp Ser Lys Ser  
 20                      25                      30  
 Ser Tyr Leu Lys Ser Gln Thr Pro Cys Gln Ile Pro Met Cys His Phe  
 35                      40                      45  
 Ser Gly Pro Thr Ile Gly Ser Tyr Lys Gly Arg Thr Pro His Glu Gly  
 50                      55                      60  
 Lys Leu Pro Ser Pro Cys Gln Thr Trp Gly Thr Ala Asn Ala Leu Gln  
 65                      70                      75                      80  
 Ser Leu Lys Lys Val Ala Val Lys Asp Pro Asp Pro Arg Pro Ser His  
 85                      90                      95  
 Ala Leu Arg His Ile Cys Ile Pro Ser Pro Ser Thr Ser Val  
 100                      105                      110



&lt;210&gt; 2856

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2856

Met Trp Ser Gly Arg Asp Thr Cys Pro Leu Lys Asn Ser Ala Leu Asp

1 5 10 15

Ser Lys Thr Ser Leu Ala Pro Ala Arg Ala Pro Thr Gly Ser Ala Glu

20 25 30

Gly Ser His Cys Pro Leu Ser Gly Tyr Leu Leu Pro Pro Ala Ser Gln

35 40 45

Leu Trp Arg Arg Arg Met Leu Arg Arg Arg Arg Arg Ser Leu Pro Ser

50 55 60

Trp Ser Ser Trp Gly Val Gln Cys Arg Leu Gly Ser Gln His Pro Gly

65 70 75 80

Ala Cys Ser Lys Pro Gly Gln Val Thr Gln Asp Ala Arg Arg Arg Pro

85 90 95

Glu Gly Leu Ala Gly Glu Gly Gly Pro Gln Glu Ala Ala Gln Glu Ile

100 105 110

Arg Leu Leu Leu Leu Ile Thr Cys Pro Val Leu Gly Arg Met Asp Thr

115 120 125

His Gly Val Ser Cys Pro Ser Ala Pro Val Leu Cys Ser Trp Thr Ala

130 135 140

Thr Thr Gln Arg Thr Ser Leu Glu Val Gln Glu Asn Pro Ser Gln Leu

145 150 155 160

Arg Thr Arg Ile Pro Glu Gln Gly Arg Ile Thr Ser Ala Phe His Thr

165 170 175  
 Pro Lys Glu Gly Phe Ala Glu  
 180

<210> 2857

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2857

Met Ile His Ala Arg His Leu Gly Leu Lys Arg Thr Val Thr Ser Ser  
 1 5 10 15  
 Glu Ala Leu Leu Tyr Ser Ser Asp Gln Val Ala Asn Thr Ser Leu His  
 20 25 30  
 Thr Arg Ala Gln Asn Gln Lys Gln Ala Gly Ile Val Lys Leu Gly Gln  
 35 40 45  
 Trp His Ala Pro Val Ile Pro Ala Thr Trp Glu Ala Glu Val Gly Gly  
 50 55 60  
 Ser Leu Glu Pro Arg Ser Ser Lys Pro Met Arg Phe His Leu Gln Lys  
 65 70 75 80  
 Glu Arg Lys Lys Gln Glu Thr Gly Cys Ser Leu Val Cys Leu Pro Pro  
 85 90 95  
 Gln His Arg Thr Leu Leu Ile Thr Gly  
 100 105

<210> 2858

<211> 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

Met Pro Arg Gln Phe Gln Asp Thr Gly Phe Ser Arg Pro Gly Leu Gly  
1 5 10 15  
Gln Pro Arg Arg Cys Asp Pro Glu Pro Arg Lys Ser Asp Gln Gln Leu  
20 25 30  
Asp Cys Ala Leu Asp Leu Met Arg Arg Leu Pro Pro Gln Gln Ile Glu  
35 40 45  
Lys Asn Leu Ser Asp Leu Ile Asp Leu Val Pro Ser Leu Cys Glu Asp  
50 55 60  
Leu Leu Ser Ser Val Asp Gln Pro Leu Lys Ile Ala Arg Asp Lys Val  
65 70 75 80  
Val Gly Lys Asp Tyr Leu Leu Cys Asp Tyr Asn Arg Asp Gly Asp Ser  
85 90 95  
Tyr Arg Ser Pro Trp Ser Asn Lys Tyr Asp Pro Pro Leu Glu Asp Gly  
100 105 110  
Ala Met Pro Ser Ala Arg Leu Arg Lys Leu Glu Val Glu Ala Asn Asn  
115 120 125  
Ala Phe Asp Gln Tyr Arg Asp Leu Tyr Phe Glu Gly Gly Val Ser Ser  
130 135 140  
Val Tyr Leu Trp Asp Leu Asp His Gly Phe Ala Gly Val Ile Leu Ile  
145 150 155 160  
Lys Lys Ala Gly Asp Gly Ser Lys Lys Ile Lys Gly Cys Trp Asp Ser  
165 170 175  
Ile His Val Val Glu Val Gln Glu Lys Ser Ser Gly Arg Thr Ala His  
180 185 190  
Tyr Lys Leu Thr Ser Thr Val Met Leu Trp Leu Gln Thr Asn Lys Ser

195	200	205
Gly Ser Gly Thr Met Asn Leu Gly Gly Ser Leu Thr Arg Gln Met Glu		
210	215	220
Lys Asp Glu Thr Val Ser Asp Cys Ser Pro His Ile Ala Asn Ile Gly		
225	230	235
Arg Leu Val Glu Val Cys Ala Asp Phe Cys Arg Gln Ile Lys Thr Arg		
245	250	255
Ser Ser Glu Glu		
260		

&lt;210&gt; 2859

&lt;211&gt; 710

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

Met Val Met Ala Cys Arg Val Val Asn Lys Arg Arg His Met Gly Leu		
1	5	10
Gln Gln Leu Ser Ser Phe Ala Glu Thr Gly Arg Thr Phe Leu Gly Pro		
20	25	30
Leu Lys Ser Ser Lys Phe Ile Ile Asp Glu Glu Cys His Glu Ser Val		
35	40	45
Leu Ile Ser Ser Thr Val Arg Leu Leu Glu Ser Leu Asp Leu Thr Ser		
50	55	60
Ala Val Gly Gln Leu Leu Asn Glu Ala Val Gln Ala Gln Asn Asn Thr		
65	70	75
Tyr Arg Thr Gly Ile Ser Thr Leu Leu Phe Leu Val Gly Ala Trp Ser		
85	90	95

Ser Ala Val Glu Glu Cys Leu His Leu Gly Val Pro Ile Ser Ile Ile  
 100 105 110  
 Val Ser Val Met Ser Glu Gly Leu Asn Phe Cys Ser Glu Glu Val Val  
 115 120 125  
 Ser Leu His Val Pro Val His Asn Ile Phe Asp Cys Met Asp Ser Thr  
 130 135 140  
 Lys Thr Phe Ser Gln Leu Glu Thr Phe Ser Val Ser Leu Cys Pro Phe  
 145 150 155 160  
 Leu Gln Val Pro Ser Asp Thr Asp Leu Ile Glu Glu Leu His Gly Leu  
 165 170 175  
 Lys Asp Val Ala Ser Gln Thr Leu Thr Ile Ser Asn Leu Ser Gly Arg  
 180 185 190  
 Pro Leu Lys Ser Tyr Glu Leu Phe Lys Pro Gln Thr Lys Val Glu Ala  
 195 200 205  
 Asp Asn Asn Thr Ser Arg Thr Leu Lys Asn Ser Leu Leu Ala Asp Thr  
 210 215 220  
 Cys Cys Arg Gln Ser Ile Leu Ile His Ser Arg His Phe Asn Arg Thr  
 225 230 235 240  
 Asp Asn Thr Glu Gly Val Ser Lys Pro Asp Gly Phe Gln Glu His Val  
 245 250 255  
 Thr Ala Thr His Lys Thr Tyr Arg Cys Asn Asp Leu Val Glu Leu Ala  
 260 265 270  
 Val Gly Leu Ser His Gly Asp His Ser Ser Met Lys Leu Val Glu Glu  
 275 280 285  
 Ala Val Gln Leu Gln Tyr Gln Asn Ala Cys Val Gln Gln Gly Asn Cys  
 290 295 300  
 Thr Lys Pro Phe Met Phe Asp Ile Ser Arg Ile Phe Thr Cys Cys Leu  
 305 310 315 320  
 Pro Gly Leu Pro Glu Thr Ser Ser Cys Val Cys Pro Gly Tyr Ile Thr

325	330	335
Val Val Ser Val Ser Asn Asn Pro Val Ile Lys Glu Leu Gln Asn Gln		
340	345	350
Pro Val Arg Ile Val Leu Ile Glu Gly Asp Leu Thr Glu Asn Tyr Arg		
355	360	365
His Leu Gly Phe Asn Lys Ser Ala Asn Ile Lys Thr Val Leu Asp Ser		
370	375	380
Met Gln Leu Gln Glu Asp Ser Ser Glu Glu Leu Trp Ala Asn His Val		
385	390	395
Leu Gln Val Leu Ile Gln Phe Lys Val Asn Leu Val Leu Val Gln Gly		
405	410	415
Asn Val Ser Glu Arg Leu Ile Glu Lys Cys Ile Asn Ser Lys Arg Leu		
420	425	430
Val Ile Gly Ser Val Asn Gly Ser Val Met Gln Ala Phe Ala Glu Ala		
435	440	445
Ala Gly Ala Val Gln Val Ala Tyr Ile Thr Gln Val Asn Glu Asp Cys		
450	455	460
Val Gly Asp Gly Val Cys Val Thr Phe Trp Arg Ser Ser Pro Leu Asp		
465	470	475
Val Val Asp Arg Asn Asn Arg Ile Ala Ile Leu Leu Lys Thr Glu Gly		
485	490	495
Ile Asn Leu Val Thr Ala Val Leu Thr Asn Pro Val Thr Ala Gln Met		
500	505	510
Gln Ile Lys Glu Asp Arg Phe Trp Thr Cys Ala Tyr Arg Leu Tyr Tyr		
515	520	525
Ala Leu Lys Glu Glu Lys Val Phe Leu Gly Gly Gly Ala Val Glu Phe		
530	535	540
Leu Cys Leu Ser Cys Leu His Ile Leu Ala Glu Gln Ser Leu Lys Lys		
545	550	555
		560

Glu Asn His Ala Cys Ser Gly Trp Leu His Asn Thr Ser Ser Trp Leu  
                             565                            570                            575  
 Ala Ser Ser Leu Ala Ile Tyr Arg Pro Thr Val Leu Lys Phe Leu Ala  
                             580                            585                            590  
 Asn Gly Trp Gln Lys Tyr Leu Ser Thr Leu Leu Tyr Asn Thr Ala Asn  
                             595                            600                            605  
 Tyr Ser Ser Glu Phe Glu Ala Ser Thr Tyr Ile Gln His His Leu Gln  
                             610                            615                            620  
 Asn Ala Thr Asp Ser Gly Ser Pro Ser Ser Tyr Ile Leu Asn Glu Tyr  
 625                            630                            635                            640  
 Ser Lys Leu Asn Ser Arg Ile Phe Asn Ser Asp Ile Ser Asn Lys Leu  
                             645                            650                            655  
 Glu Gln Ile Pro Arg Val Tyr Asp Val Val Thr Pro Lys Ile Glu Ala  
                             660                            665                            670  
 Trp Arg Arg Ala Leu Asp Leu Val Leu Leu Val Leu Gln Thr Asp Ser  
                             675                            680                            685  
 Glu Ile Ile Thr Gly His Gly His Thr Gln Ile Asn Ser Gln Glu Leu  
                             690                            695                            700  
 Thr Gly Phe Leu Phe Leu  
 705                            710

&lt;210&gt; 2860

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2860

Met Thr Ser His Gly Ala Phe Thr Ser Gln Val Tyr Cys Gly Ile Thr

1	5	10	15
Tyr Thr His Lys Ala His Pro Phe Ser Met His Ser Arg Arg Leu Gly			
20	25	30	
Lys Cys Pro Glu Trp Gly Thr Ser Ala Pro Thr Glu Ala Ala His Ile			
35	40	45	
Leu Pro Leu Cys Ser Gln Ala Pro Ser Arg Pro Pro Thr Thr Thr Cys			
50	55	60	
Leu Ser Ser Val Leu Gln Leu Cys Val Leu Gln Asn Cys Pro Val Ser			
65	70	75	80
Asp Ser His Arg Met Glu Thr Phe Val Ser Gly Phe Leu His Phe Ala			
85	90	95	
Ala Gly Phe Ala Gly Pro Val Trp Trp His Gln Arg Pro Ala Leu Gly			
100	105	110	
Ala Ala Glu Leu			
115			

&lt;210&gt; 2861

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2861

Met Thr Thr Glu Met Gly Glu Ala Arg His Val Arg Thr Leu Ser Ser			
1	5	10	15
Glu Arg Cys Pro Arg Leu Leu Ala Ser Cys Ala Val Val Leu Trp Val			
20	25	30	
Cys His Thr Leu Pro Cys Phe Cys Ser His Trp Glu Ala His Ser Trp			
35	40	45	



Leu Thr Ser Pro Ser Gln Gly Pro Thr Trp Glu Pro Gly Ser Leu Asp  
 50 55 60  
 Cys Pro Gly His Arg Phe Gln Gly Pro Pro Leu Leu Ser Ser Glu Pro  
 65 70 75 80  
 Arg Gly Ile Leu Leu Leu Lys Asn Thr Tyr Gly Ile Pro Ile Cys Ala  
 85 90 95  
 Gly Gln Cys Pro Lys His Leu Asp Tyr Ile Arg Glu Glu His Arg Pro  
 100 105 110  
 His Pro Cys Pro His Ala Ala Tyr Val Phe Trp Arg Lys Val Glu Thr  
 115 120 125  
 Gln Val Leu Gly Phe Arg Ala Pro Pro Ala Gly Gly Cys Ala Val Arg  
 130 135 140  
 Ser Gly Arg Glu Gly Lys Cys Thr Ala Ala Cys Glu Pro Tyr Gln Pro  
 145 150 155 160  
 Arg Arg Met Pro Leu Pro Leu Ser Thr Thr Leu Ala Ser Cys Ile Pro  
 165 170 175  
 Ser Pro His Val Pro Pro Thr Phe Lys Glu  
 180 185

&lt;210&gt; 2862

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2862

Met Tyr Arg Pro Val Met Ala Ser Cys Thr Ser Val Ser Leu Trp Met  
 1 5 10 15  
 Ile Ala Leu Leu Val Phe Gly Val Leu Ala Ile Phe Gly Ile Ala Ile

20 25 30  
 Gly Leu Leu Val His Phe Leu Ala Val Ala Asn Arg Ile Tyr Phe Tyr  
 35 40 45  
 Gln Gly Ser Phe Lys Met Leu Asp Ile Pro Tyr Asn Ser Asn Tyr Glu  
 50 55 60  
 Arg Glu Thr Ser Pro Glu Asn Asn Tyr Leu Ser Gln Ile Leu Glu Thr  
 65 70 75 80  
 Arg Trp Leu Met His Phe Lys Val Leu Ala Phe Thr Asp Asn Ile Ser  
 85 90 95  
 Phe Leu Lys Ser Ser His Trp Cys Lys  
 100 105

&lt;210&gt; 2863

&lt;211&gt; 557

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

Met Ser Glu Ala Ala Ser Gln Gly Leu Arg Ala Ala Ala Arg Ser Val  
 1 5 10 15  
 Trp Ala Gly Thr Asp Arg Arg Gly Cys Arg His Arg Arg Pro Val Pro  
 20 25 30  
 Leu Cys Ser Gly Thr Ala Leu Ser Gln Cys Pro Arg Phe Pro Arg Arg  
 35 40 45  
 Leu His Ala Ala Arg Leu Gly Asn Met Leu Gly Val Leu Val Leu Gly  
 50 55 60  
 Ala Leu Ala Leu Ala Gly Leu Gly Phe Pro Ala Pro Gly Cys Gly Asp  
 65 70 75 80

Pro Lys Arg Leu Gly Pro Leu Arg Gly Phe Gln Trp Val Thr Gly Asp  
                     85                    90                    95  
 Asn Asn Thr Ser Tyr Ser Arg Trp Ala Arg Leu Asp Leu Asn Gly Ala  
                     100                    105                    110  
 Pro Leu Cys Gly Pro Leu Cys Val Ala Val Ser Ala Ala Glu Ala Thr  
                     115                    120                    125  
 Val Pro Ser Glu Pro Ile Trp Glu Glu Gln Gln Cys Glu Val Lys Ala  
                     130                    135                    140  
 Asp Gly Phe Leu Cys Glu Phe His Phe Pro Ala Thr Cys Arg Pro Leu  
 145                    150                    155                    160  
 Ala Val Glu Pro Gly Ala Ala Ala Ala Ala Val Ser Ile Thr Tyr Gly  
                     165                    170                    175  
 Thr Pro Phe Ala Ala Arg Gly Ala Asp Phe Gln Ala Leu Pro Val Gly  
                     180                    185                    190  
 Ser Ser Ala Ala Val Ala Pro Leu Gly Leu Gln Leu Met Cys Thr Ala  
                     195                    200                    205  
 Pro Pro Gly Ala Val Gln Gly His Trp Ala Arg Glu Ala Pro Gly Ala  
                     210                    215                    220  
 Trp Asp Cys Ser Val Glu Asn Gly Gly Cys Glu His Ala Cys Asn Ala  
 225                    230                    235                    240  
 Ile Pro Gly Ala Pro Arg Cys Gln Cys Pro Ala Gly Ala Ala Leu Gln  
                     245                    250                    255  
 Ala Asp Gly Arg Ser Cys Thr Ala Ser Ala Thr Gln Ser Cys Asn Asp  
                     260                    265                    270  
 Leu Cys Glu His Phe Cys Val Pro Asn Pro Asp Gln Pro Gly Ser Tyr  
                     275                    280                    285  
 Ser Cys Met Cys Glu Thr Gly Tyr Arg Leu Ala Ala Asp Gln His Arg  
                     290                    295                    300  
 Cys Glu Asp Val Asp Asp Cys Ile Leu Glu Pro Ser Pro Cys Pro Gln

305                      310                      315                      320  
Arg Cys Val Asn Thr Gln Gly Gly Phe Glu Cys His Cys Tyr Pro Asn  
                         325                      330                      335  
Tyr Asp Leu Val Asp Gly Glu Cys Val Glu Pro Val Asp Pro Cys Phe  
                         340                      345                      350  
Arg Ala Asn Cys Glu Tyr Gln Cys Gln Pro Leu Asn Gln Thr Ser Tyr  
                         355                      360                      365  
Leu Cys Val Cys Ala Glu Gly Phe Ala Pro Ile Pro His Glu Pro His  
                         370                      375                      380  
Arg Cys Gln Met Phe Cys Asn Gln Thr Ala Cys Pro Ala Asp Cys Asp  
385                      390                      395                      400  
Pro Asn Thr Gln Ala Ser Cys Glu Cys Pro Glu Gly Tyr Ile Leu Asp  
                         405                      410                      415  
Asp Gly Phe Ile Cys Met Asp Ile Asp Glu Cys Glu Asn Gly Gly Phe  
                         420                      425                      430  
Cys Ser Gly Val Cys His Asn Leu Pro Gly Thr Phe Glu Cys Ile Cys  
                         435                      440                      445  
Gly Pro Asp Ser Ala Leu Ala Arg His Ile Gly Thr Asp Cys Asp Ser  
                         450                      455                      460  
Gly Lys Val Asp Gly Gly Asp Ser Gly Ser Gly Glu Pro Pro Pro Ser  
465                      470                      475                      480  
Pro Thr Pro Gly Ser Thr Leu Thr Pro Pro Ala Val Gly Leu Val His  
                         485                      490                      495  
Ser Gly Leu Leu Ile Gly Ile Ser Ile Ala Ser Leu Cys Leu Val Val  
                         500                      505                      510  
Ala Leu Leu Ala Leu Leu Cys His Leu Arg Lys Lys Gln Gly Ala Ala  
                         515                      520                      525  
Arg Ala Lys Met Glu Tyr Lys Cys Ala Ala Pro Ser Lys Glu Val Val  
                         530                      535                      540

Leu Gln His Val Arg Thr Glu Arg Thr Pro Gln Arg Leu

545

550

555

<210> 2864

<211> 740

<212> PRT

<213> Homo sapiens

<400> 2864

Met Ala Ser His Leu Arg Pro Pro Ser Pro Leu Leu Val Arg Val Tyr

1

5

10

15

Lys Ser Gly Pro Arg Val Arg Arg Lys Leu Glu Ser Tyr Phe Gln Ser

20

25

30

Ser Lys Ser Ser Gly Gly Gly Glu Cys Thr Val Ser Thr Gln Glu His

35

40

45

Glu Ala Pro Gly Thr Phe Arg Val Glu Phe Ser Glu Arg Ala Ala Lys

50

55

60

Glu Arg Val Leu Lys Lys Gly Glu His Gln Ile Leu Val Asp Glu Lys

65

70

75

80

Pro Val Pro Ile Phe Leu Val Pro Thr Glu Asn Ser Ile Lys Lys Asn

85

90

95

Thr Arg Pro Gln Ile Ser Ser Leu Thr Gln Ser Gln Ala Glu Thr Pro

100

105

110

Ser Gly Asp Met His Gln His Glu Gly His Ile Pro Asn Ala Val Asp

115

120

125

Ser Cys Leu Gln Lys Ile Phe Leu Thr Val Thr Ala Asp Leu Asn Cys

130

135

140

Asn Leu Phe Ser Lys Glu Gln Arg Ala Tyr Ile Thr Thr Leu Cys Pro

145                      150                      155                      160  
Ser Ile Arg Lys Met Glu Gly His Asp Gly Ile Glu Lys Val Cys Gly  
                         165                      170                      175  
Asp Phe Gln Asp Ile Glu Arg Ile His Gln Phe Leu Ser Glu Gln Phe  
                         180                      185                      190  
Leu Glu Ser Glu Gln Lys Gln Gln Phe Ser Pro Ser Met Thr Glu Arg  
                         195                      200                      205  
Lys Pro Leu Ser Gln Gln Glu Arg Asp Ser Cys Ile Ser Pro Ser Glu  
                         210                      215                      220  
Pro Glu Thr Lys Ala Glu Gln Lys Ser Asn Tyr Phe Glu Val Pro Leu  
225                      230                      235                      240  
Pro Tyr Phe Glu Tyr Phe Lys Tyr Ile Cys Pro Asp Lys Ile Asn Ser  
                         245                      250                      255  
Ile Glu Lys Arg Phe Gly Val Asn Ile Glu Ile Gln Glu Ser Ser Pro  
                         260                      265                      270  
Asn Met Val Cys Leu Asp Phe Thr Ser Ser Arg Ser Gly Asp Leu Glu  
                         275                      280                      285  
Ala Ala Arg Glu Ser Phe Ala Ser Glu Phe Gln Lys Asn Thr Glu Pro  
                         290                      295                      300  
Leu Lys Gln Glu Cys Val Ser Leu Ala Asp Ser Lys Gln Ala Asn Lys  
305                      310                      315                      320  
Phe Lys Gln Glu Leu Asn His Gln Phe Thr Lys Leu Leu Ile Lys Glu  
                         325                      330                      335  
Lys Gly Gly Glu Leu Thr Leu Leu Gly Thr Gln Asp Asp Ile Ser Ala  
                         340                      345                      350  
Ala Lys Gln Lys Ile Ser Glu Ala Phe Val Lys Ile Pro Val Lys Leu  
                         355                      360                      365  
Phe Ala Ala Asn Tyr Met Met Asn Val Ile Glu Val Asp Ser Ala His  
                         370                      375                      380

Tyr Lys Leu Leu Glu Thr Glu Leu Leu Gln Glu Ile Ser Glu Ile Glu  
 385 390 395 400  
 Lys Arg Tyr Asp Ile Cys Ser Lys Val Ser Glu Lys Gly Gln Lys Thr  
 405 410 415  
 Cys Ile Leu Phe Glu Ser Lys Asp Lys Gln Val Asp Leu Ser Val His  
 420 425 430  
 Ala Tyr Ala Ser Phe Ile Asp Ala Phe Gln His Ala Ser Cys Gln Leu  
 435 440 445  
 Met Arg Glu Val Leu Leu Leu Lys Ser Leu Gly Lys Glu Arg Lys His  
 450 455 460  
 Leu His Gln Thr Lys Phe Ala Asp Asp Phe Arg Lys Arg His Pro Asn  
 465 470 475 480  
 Val His Phe Val Leu Asn Gln Glu Ser Met Thr Leu Thr Gly Leu Pro  
 485 490 495  
 Asn His Leu Ala Lys Ala Lys Gln Tyr Val Leu Lys Gly Gly Gly Met  
 500 505 510  
 Ser Ser Leu Ala Gly Lys Lys Leu Lys Glu Gly His Glu Thr Pro Met  
 515 520 525  
 Asp Ile Asp Ser Asp Asp Ser Lys Ala Ala Ser Pro Pro Leu Lys Gly  
 530 535 540  
 Ser Val Ser Ser Glu Ala Ser Glu Leu Asp Lys Lys Glu Lys Gly Ile  
 545 550 555 560  
 Cys Val Ile Cys Met Asp Thr Ile Ser Asn Lys Lys Val Leu Pro Lys  
 565 570 575  
 Cys Lys His Glu Phe Cys Ala Pro Cys Ile Asn Lys Ala Met Ser Tyr  
 580 585 590  
 Lys Pro Ile Cys Pro Thr Cys Gln Thr Ser Tyr Gly Ile Gln Lys Gly  
 595 600 605  
 Asn Gln Pro Glu Gly Ser Met Val Phe Thr Val Ser Arg Asp Ser Leu

610	615	620	
Pro Gly Tyr Glu Ser Phe Gly Thr Ile Val Ile Thr Tyr Ser Met Lys			
625	630	635	640
Ala Gly Ile Gln Thr Glu Glu His Pro Asn Pro Gly Lys Arg Tyr Pro			
	645	650	655
Gly Ile Gln Arg Thr Ala Tyr Leu Pro Asp Asn Lys Glu Gly Arg Lys			
	660	665	670
Val Leu Lys Leu Leu Tyr Arg Ala Phe Asp Gln Lys Leu Ile Phe Thr			
	675	680	685
Val Gly Tyr Ser Arg Val Leu Gly Val Ser Asp Val Ile Thr Trp Asn			
	690	695	700
Asp Ile His His Lys Thr Ser Arg Phe Gly Gly Pro Glu Met Tyr Gly			
705	710	715	720
Tyr Pro Asp Pro Ser Tyr Leu Lys Arg Val Lys Glu Glu Leu Lys Ala			
	725	730	735
Lys Gly Ile Glu			
	740		

&lt;210&gt; 2865

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2865

Met Leu Cys Ser Val Ser Leu Val Ala Ala Pro Gly Ser Ser Arg Ser			
1	5	10	15
Ser Asp Pro Gly Lys Gly Ser Gly Pro Pro Pro Ala Asn Thr His Pro			
	20	25	30



Gln Lys Gln Gln Gln Gln Gln Ala Arg Pro Val His Gly Ala Ala Gly  
35 40 45  
Gly Thr Cys Pro His Arg Pro Pro Pro Ala Ala Ala Leu Asp Phe Gln  
50 55 60  
Leu Gly Pro Leu Cys Gly Leu Met Gly Leu Arg Cys Ala Ala Leu Gln  
65 70 75 80  
Arg Pro Pro Cys Pro Pro Glu Leu Ala Ala Ala Arg Leu Ala Leu Ala  
85 90 95  
Ala Gly Gly Arg Gly Trp Val Lys Pro Val Leu Arg Pro Arg Leu Arg  
100 105 110  
Pro Ala Gln Pro Ala His Pro Arg Asn Arg Ala Arg Pro Leu Cys Arg  
115 120 125  
Leu Gly Val Gly Ser Arg Gly Lys Gly Arg Ala Cys Gly Ser Pro His  
130 135 140  
Pro Ala Ala Leu Leu Pro Ala Leu Ser Leu Arg Ala Ser His Pro Ser  
145 150 155 160  
Arg Pro Gly Thr Gln Phe Pro Ala Arg Ala Thr Ala Arg Pro Ser Arg  
165 170 175  
Met Leu Trp Ala Arg Gly Pro Gly Arg Pro His Cys Gly Ser Cys Ser  
180 185 190  
Ser Pro Ala Ala Ala Arg His Arg Val His Ser Leu Thr His Leu Pro  
195 200 205  
Pro Pro Leu Ala Ser Pro Ser Pro Trp Ser Leu Ala Pro  
210 215 220

&lt;210&gt; 2866

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2866

Met Gly Ala Arg Gly Leu Gly Gly Gly Ser Arg Val Met Cys Leu Thr  
1 5 10 15  
Ser Ala Pro Ser Leu Cys Cys Ser Phe Thr Trp Ser Ala Ala Arg Thr  
20 25 30  
Asp Arg Asn Val Ile Ser Val Leu Ser Gly Gln Val Val Glu Met Phe  
35 40 45  
Asp Arg Gln Phe Gln Glu Leu Tyr Leu Met Ser His Ser Val Ser Leu  
50 55 60  
Lys Gly Ile Pro Met Glu Lys Glu Pro Glu Pro Glu Pro Ile Val Leu  
65 70 75 80  
Pro Ser Val Val Pro Leu Val Pro Ala Gly Thr Val Ala Lys Lys Leu  
85 90 95  
Val Asn Pro Lys Tyr Ala Leu Val Lys Ala Lys Ser Val Asp Glu Ile  
100 105 110  
Ala Lys Ile Ser Ser Glu Lys Gln Glu Ala Lys Lys Pro Leu Gly Leu  
115 120 125  
Lys Gly Pro Ala Leu Ala Glu His Pro Gly Glu Leu Pro Glu Leu Leu  
130 135 140  
Pro Pro Ile His Pro Gly Leu Leu His Leu Glu Arg Ala Asn Met Phe  
145 150 155 160  
Glu Tyr Leu Pro Thr Trp Val Glu Pro Asp Pro Glu Pro Gly Ser Asp  
165 170 175  
Ile Leu Gly Tyr Ile Asn Ile Ile Asp Pro Asn Ile Trp Asn Pro Gln  
180 185 190  
Pro Ser Gln Met Asn Arg Ile Lys Ile Arg Asp Thr Ser Gln Ala Ser  
195 200 205

Ala Gln His Gln Leu Trp Lys Gln Ser Gln Asp Ser Arg Pro Arg Pro  
 210 215 220  
 Glu Pro Cys Pro Pro Pro Glu Pro Ser Ala Pro Gln Asp Gly Val Pro  
 225 230 235 240  
 Ala Glu Asn Gly Leu Pro Gln Gly Asp Pro Glu Pro Leu Pro Pro Val  
 245 250 255  
 Pro Lys Pro Arg Thr Val Pro Val Ala Asp Val Leu Ala Arg Asp Ser  
 260 265 270  
 Ser Asp Ile Gly Trp Val Leu Glu Leu Pro Lys Glu Glu Ala Pro Gln  
 275 280 285  
 Asn Gly Thr Asp His Arg Leu Pro Arg Met Ala Gly Pro Gly His Ala  
 290 295 300  
 Pro Leu Gln Arg Gln Leu Ser Val Thr Gln Asp Asp Pro Glu Ser Leu  
 305 310 315 320  
 Gly Val Gly Leu Pro Asn Gly Leu Asp Gly Val Glu Glu Glu Asp Asp  
 325 330 335  
 Asp Asp Tyr Val Thr Leu Ser Asp Gln Asp Ser His Ser Gly Ser Ser  
 340 345 350  
 Gly Arg Gly Pro Gly Pro Arg Arg Pro Ser Val Ala Ser Ser Val Ser  
 355 360 365  
 Glu Glu Tyr Phe Glu Val Arg Glu His Ser Val Pro Leu Arg Arg Arg  
 370 375 380  
 His Ser Glu Gln Val Ala Asn Gly Pro Thr Pro Pro Pro Arg Arg Gln  
 385 390 395 400  
 Leu Ser Ala Pro His Ile Thr Arg Gly Thr Phe Val Gly Pro Gln Gly  
 405 410 415  
 Gly Ser Pro Trp Ala Gln Ser Arg Gly Arg Glu Glu Ala Asp Ala Leu  
 420 425 430  
 Lys Arg Met Gln Ala Gln Arg Ser Thr Asp Lys Glu Ala Gln Val Gly

435                      440                      445  
 Gln Gly Pro Cys Thr Pro Gly Val Thr Ser Pro Ser Leu Pro Ala Thr  
 450                      455                      460  
 Gln Glu Leu Glu Leu Leu Ser Ser Gly Leu Pro Cys Pro  
 465                      470                      475

<210> 2867

<211> 216

<212> PRT

<213> Homo sapiens

<400> 2867

Met Thr Ala Ser Arg Ala Trp Asp Met Gly Gly Arg Ser Ala Arg Arg  
 1                      5                      10                      15  
 Asn Ser Ser Arg Ser Ser Val Pro Leu Pro Leu Arg Ser His Phe Leu  
 20                      25                      30  
 His Thr Pro Ser Ala Ser Ala Trp Ser Ser Thr Ser Pro Ser Leu Ala  
 35                      40                      45  
 Arg Pro Cys Arg Asn Ser Ser Ala Ser Arg Asp Leu Leu Pro Ser Arg  
 50                      55                      60  
 Ser Ser Trp Arg Lys Asn Leu Ala Arg Pro Trp Met Pro Glu Ala Pro  
 65                      70                      75                      80  
 Arg Asp Arg His Cys Ala Arg Ser Phe Ser Met Val Ala Ser Thr Ala  
 85                      90                      95  
 Ser Met Leu Gly Leu Gly Ser Gly Gln Leu Ala Cys Val Cys Pro Arg  
 100                      105                      110  
 Val Leu Pro Ala Gly Pro Cys Val Ser Cys Val Val Pro Gly Glu Thr  
 115                      120                      125

Val Ala Ser Gly Arg Cys Leu Trp Arg Trp Gly Gly Ala Gln Leu His  
 130 135 140  
 Glu Cys Thr Val Leu Gly Ser Gly Glu Trp Gly Arg Asp Gly Cys Ala  
 145 150 155 160  
 Gln Pro Asp Cys Leu Leu Asn Cys Gln Pro His Arg Ala Trp Asp Arg  
 165 170 175  
 Ala Arg Ser Leu Trp His Cys Ile Pro Ser Trp Leu Gln Gly Gly Gly  
 180 185 190  
 Ala Gly His Cys Pro Ala Gly Ala Glu Met Pro Trp Met Glu Thr Ser  
 195 200 205  
 Pro Trp Leu Gly Arg Leu Asp Ala  
 210 215

<210> 2868

<211> 842

<212> PRT

<213> Homo sapiens

<400> 2868

Met Trp Ala Gln Leu Leu Leu Gly Met Leu Ala Leu Ser Pro Ala Ile  
 1 5 10 15  
 Ala Glu Glu Leu Pro Asn Tyr Leu Val Thr Leu Pro Ala Arg Leu Asn  
 20 25 30  
 Phe Pro Ser Val Gln Lys Val Cys Leu Asp Leu Ser Pro Gly Tyr Ser  
 35 40 45  
 Asp Val Lys Phe Thr Val Thr Leu Glu Thr Lys Asp Lys Thr Gln Lys  
 50 55 60  
 Leu Leu Glu Tyr Ser Gly Leu Lys Lys Arg His Leu His Cys Ile Ser

65	70	75	80
Phe Leu Val Pro Pro Pro Ala Gly Gly Thr Glu Glu Val Ala Thr Ile			
	85	90	95
Arg Val Ser Gly Val Gly Asn Asn Ile Ser Phe Glu Glu Lys Lys Lys			
	100	105	110
Val Leu Ile Gln Arg Gln Gly Asn Gly Thr Phe Val Gln Thr Asp Lys			
	115	120	125
Pro Leu Tyr Thr Ser Gly Gln Gln Val Tyr Phe Arg Ile Val Thr Met			
	130	135	140
Asp Ser Asn Phe Val Pro Val Asn Asp Lys Tyr Ser Met Val Glu Leu			
145	150	155	160
Gln Asp Pro Asn Ser Asn Arg Ile Ala Gln Trp Leu Glu Val Val Pro			
	165	170	175
Glu Gln Gly Ile Val Asp Leu Ser Phe Gln Leu Ala Pro Glu Ala Met			
	180	185	190
Leu Gly Thr Tyr Thr Val Ala Val Ala Glu Gly Lys Thr Phe Gly Thr			
	195	200	205
Phe Ser Val Glu Glu Tyr Val Leu Pro Lys Phe Lys Val Glu Val Val			
	210	215	220
Glu Pro Lys Glu Leu Ser Thr Val Gln Glu Ser Phe Leu Val Lys Ile			
225	230	235	240
Cys Cys Arg Tyr Thr Tyr Gly Lys Pro Met Leu Gly Ala Val Gln Val			
	245	250	255
Ser Val Cys Gln Lys Ala Asn Thr Tyr Trp Tyr Arg Glu Val Glu Arg			
	260	265	270
Glu Gln Leu Pro Asp Lys Cys Arg Asn Leu Ser Gly Gln Thr Asp Lys			
	275	280	285
Thr Gly Cys Phe Ser Ala Pro Val Asp Met Ala Thr Phe Asp Leu Ile			
	290	295	300

Gly Tyr Ala Tyr Ser His Gln Ile Asn Val Val Ala Thr Val Val Glu  
305 310 315 320  
Glu Gly Thr Gly Val Glu Ala Asn Ala Thr Gln Asn Ile Tyr Ile Ser  
325 330 335  
Pro Gln Met Gly Ser Met Thr Phe Glu Asp Thr Ser Asn Phe Tyr His  
340 345 350  
Pro Asn Phe Pro Phe Ser Gly Lys Ile Arg Val Arg Gly His Asp Asp  
355 360 365  
Ser Phe Leu Lys Asn His Leu Val Phe Leu Val Ile Tyr Gly Thr Asn  
370 375 380  
Gly Thr Phe Asn Gln Thr Leu Val Thr Asp Asn Asn Gly Leu Ala Pro  
385 390 395 400  
Phe Thr Leu Glu Thr Ser Gly Trp Asn Gly Thr Asp Val Ser Leu Glu  
405 410 415  
Gly Lys Phe Gln Met Glu Asp Leu Val Tyr Asn Pro Glu Gln Val Pro  
420 425 430  
Arg Tyr Tyr Gln Asn Ala Tyr Leu His Leu Arg Pro Phe Tyr Ser Thr  
435 440 445  
Thr Arg Ser Phe Leu Gly Ile His Arg Leu Asn Gly Pro Leu Lys Cys  
450 455 460  
Gly Gln Pro Gln Glu Val Leu Ala Asp Tyr Tyr Ile Asp Pro Ala Asp  
465 470 475 480  
Ala Ser Pro Asp Gln Glu Ile Ser Phe Ser Tyr Tyr Leu Ile Gly Lys  
485 490 495  
Gly Ser Leu Val Met Glu Gly Gln Lys His Leu Asn Ser Lys Lys Lys  
500 505 510  
Gly Leu Lys Ala Ser Phe Ser Leu Ser Leu Thr Phe Thr Ser Arg Leu  
515 520 525  
Ala Pro Asp Pro Ser Leu Val Ile Tyr Ala Ile Phe Pro Ser Gly Gly

530 535 540  
Val Val Ala Asp Lys Ile Gln Phe Ser Val Glu Met Cys Phe Asp Asn  
545 550 555 560  
Gln Val Ser Leu Gly Phe Ser Pro Ser Gln Gln Leu Pro Gly Ala Glu  
565 570 575  
Val Glu Leu Gln Leu Gln Ala Ala Pro Gly Ser Leu Cys Ala Leu Arg  
580 585 590  
Ala Val Asp Glu Ser Val Leu Leu Leu Arg Pro Asp Arg Glu Leu Ser  
595 600 605  
Asn Arg Ser Val Tyr Gly Met Phe Pro Phe Trp Tyr Gly His Tyr Pro  
610 615 620  
Tyr Gln Val Ala Glu Tyr Asp Gln Cys Pro Val Ser Gly Pro Trp Asp  
625 630 635 640  
Phe Pro Gln Pro Leu Ile Asp Pro Met Pro Gln Gly His Ser Ser Gln  
645 650 655  
Arg Ser Ile Ile Trp Arg Pro Ser Phe Ser Glu Gly Thr Asp Leu Phe  
660 665 670  
Ser Phe Phe Arg Asp Val Gly Leu Lys Ile Leu Ser Asn Ala Lys Ile  
675 680 685  
Lys Lys Pro Val Asp Cys Ser His Arg Ser Pro Glu Tyr Ser Thr Ala  
690 695 700  
Met Gly Ala Gly Gly Gly His Pro Glu Ala Phe Glu Ser Ser Thr Pro  
705 710 715 720  
Leu His Gln Ala Glu Asp Ser Gln Val Arg Gln Tyr Leu Pro Glu Thr  
725 730 735  
Trp Leu Trp Asp Leu Phe Pro Ile Gly Asn Ser Gly Lys Glu Ala Val  
740 745 750  
His Val Thr Val Pro Asp Ala Ile Thr Glu Trp Lys Ala Met Ser Phe  
755 760 765



Cys Thr Ser Gln Ser Arg Gly Phe Gly Leu Ser Pro Thr Val Gly Leu  
 770 775 780  
 Thr Ala Phe Lys Pro Phe Phe Val Asp Leu Thr Leu Pro Tyr Ser Val  
 785 790 795 800  
 Val Arg Gly Glu Ser Phe Arg Leu Thr Ala Thr Ile Phe Asn Tyr Leu  
 805 810 815  
 Lys Asp Cys Ile Arg Val Gln Thr Asp Leu Ala Lys Ser His Glu Tyr  
 820 825 830  
 Gln Leu His Cys Trp Arg Trp Glu Arg Met  
 835 840

<210> 2869

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2869

Met Leu Pro Asp Cys Leu Ser Ala Glu Gly Glu Leu Arg Cys Arg Arg  
 1 5 10 15  
 Leu Leu Ala Gly Ala Thr Ala Arg Leu Arg Ala Arg Pro Ala Ser Ala  
 20 25 30  
 Ala Val Leu Val Pro Leu Cys Ser Val Arg Gly Val Pro Ala Leu Leu  
 35 40 45  
 Tyr Thr Leu Arg Ser Ser Arg Leu Thr Gly Arg His Lys Gly Asp Val  
 50 55 60  
 Ser Phe Pro Gly Gly Lys Cys Asp Pro Ala Asp Gln Asp Val Val His  
 65 70 75 80  
 Thr Ala Leu Arg Glu Thr Arg Glu Glu Leu Gly Leu Ala Val Pro Glu

15

Glu Glu Asp Glu Leu Glu Val Phe Gly Tyr Arg Asp His Asn Val Arg  
 20 25 30  
 Lys Ala Phe Cys Leu Val Ala Ser Val Leu Thr Cys Gly Gly Leu Leu  
 35 40 45  
 Leu Val Phe Tyr Trp Arg Pro Gln Trp Arg Val Trp Ala Asn Cys Ile  
 50 55 60  
 Pro Cys Pro Leu Gln Glu Ala Asp Thr Val Leu Leu Arg Thr Thr Asp  
 65 70 75 80  
 Glu Phe Gln Arg Tyr Met Arg Lys Lys Val Phe Cys Leu Tyr Leu Tyr  
 85 90 95  
 Thr Leu Lys Phe Pro Val Ser Lys Lys Trp Glu Glu Ser Leu Val Ala  
 100 105 110  
 Asp Arg His Ser Val Ile Asn Gln Ala Leu Ile Lys Pro Glu Leu Lys  
 115 120 125  
 Leu Arg Cys Met Glu Val Gln Lys Ile Arg Tyr Val Trp Asn Asp Leu  
 130 135 140  
 Glu Lys Arg Phe Gln Lys Val Gly Leu Leu Glu Asp Ser Asn Ser Cys  
 145 150 155 160  
 Ser Asp Ile His Gln Thr Phe Gly Leu Gly Leu Thr Ser Glu Glu Gln  
 165 170 175  
 Glu Val Arg Arg Leu Val Cys Gly Pro Asn Ala Ile Glu Val Glu Ile  
 180 185 190  
 Gln Pro Ile Trp Lys Leu Leu Val Lys Gln Val Leu Asn Pro Phe Tyr  
 195 200 205  
 Val Phe Gln Ala Phe Thr Leu Thr Leu Trp Leu Ser Gln Gly Tyr Ile  
 210 215 220  
 Glu Tyr Ser Val Ala Ile Ile Ile Leu Thr Val Ile Ser Ile Val Leu  
 225 230 235 240  
 Ser Val Tyr Asp Leu Arg Gln Gln Ser Val Lys Leu His Asn Leu Val

	245		250		255
Glu Asp His Asn Lys Val Gln Val Thr Ile Ile Val Lys Asp Lys Gly					
	260		265		270
Leu Glu Glu Leu Glu Ser Arg Leu Leu Val Pro Gly Asp Ile Leu Ile					
	275		280		285
Leu Pro Gly Lys Phe Ser Leu Pro Cys Asp Ala Val Leu Ile Asp Gly					
	290		295		300
Ser Cys Val Val Asn Glu Gly Met Leu Thr Gly Glu Ser Ile Pro Val					
305		310		315	320
Thr Lys Thr Pro Leu Pro Gln Met Glu Asn Thr Met Pro Trp Lys Cys					
	325		330		335
His Ser Leu Glu Asp Tyr Arg Lys His Val Leu Phe Cys Gly Thr Glu					
	340		345		350
Val Ile Gln Val Glu Pro Ser Gly Gln Gly Pro Val Arg Ala Val Val					
	355		360		365
Leu Gln Thr Gly Tyr Asn Thr Ala Lys Gly Asp Leu Val Arg Ser Ile					
	370		375		380
Leu Tyr Pro Arg Pro Leu Asn Phe Lys Leu Tyr Ser Asp Ala Phe Lys					
385		390		395	400
Phe Ile Val Phe Leu Ala Cys Leu Gly Val Met Gly Phe Phe Tyr Ala					
	405		410		415
Leu Gly Val Tyr Met Tyr His Gly Val Pro Pro Lys Asp Thr Val Thr					
	420		425		430
Met Ala Leu Ile Leu Leu Thr Val Thr Val Pro Pro Val Leu Pro Ala					
	435		440		445
Ala Leu Thr Ile Gly Asn Val Tyr Ala Gln Lys Arg Leu Lys Lys Lys					
	450		455		460
Lys Ile Phe Cys Ile Ser Pro Gln Arg Ile Asn Met Cys Gly Gln Ile					
465		470		475	480

出証特 2 0 0 4 - 3 0 5 9 6 6 0

705

710

715

&lt;210&gt; 2871

&lt;211&gt; 681

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

Met Glu Ser Met Leu Asn Lys Leu Lys Ser Thr Val Thr Lys Val Thr

1 5 10 15

Ala Asp Val Thr Ser Ala Val Met Gly Asn Pro Val Thr Arg Glu Phe

20 25 30

Asp Val Gly Arg His Ile Ala Ser Gly Gly Asn Gly Leu Ala Trp Lys

35 40 45

Ile Phe Asn Gly Thr Lys Lys Ser Thr Lys Gln Glu Val Ala Val Phe

50 55 60

Val Phe Asp Lys Lys Leu Ile Asp Lys Tyr Gln Lys Phe Glu Lys Asp

65 70 75 80

Gln Ile Ile Asp Ser Leu Lys Arg Gly Val Gln Gln Leu Thr Arg Leu

85 90 95

Arg His Pro Arg Leu Leu Thr Val Gln His Pro Leu Glu Glu Ser Arg

100 105 110

Asp Cys Leu Ala Phe Cys Thr Glu Pro Val Phe Ala Ser Leu Ala Asn

115 120 125

Val Leu Gly Asn Trp Glu Asn Leu Pro Ser Pro Ile Ser Pro Asp Ile

130 135 140

Lys Asp Tyr Lys Leu Tyr Asp Val Glu Thr Lys Tyr Gly Leu Leu Gln

145 150 155 160

Val Ser Glu Gly Leu Ser Phe Leu His Ser Ser Val Lys Met Val His  
 165 170 175  
 Gly Asn Ile Thr Pro Glu Asn Ile Ile Leu Asn Lys Ser Gly Ala Trp  
 180 185 190  
 Lys Ile Met Gly Phe Asp Phe Cys Val Ser Ser Thr Asn Pro Ser Glu  
 195 200 205  
 Gln Glu Pro Lys Phe Pro Cys Lys Glu Trp Asp Pro Asn Leu Pro Ser  
 210 215 220  
 Leu Cys Leu Pro Asn Pro Glu Tyr Leu Ala Pro Glu Tyr Ile Leu Ser  
 225 230 235 240  
 Val Ser Cys Glu Thr Ala Ser Asp Met Tyr Ser Leu Gly Thr Val Met  
 245 250 255  
 Tyr Ala Val Phe Asn Lys Gly Lys Pro Ile Phe Glu Val Asn Lys Gln  
 260 265 270  
 Asp Ile Tyr Lys Ser Phe Ser Arg Gln Leu Asp Gln Leu Ser Arg Leu  
 275 280 285  
 Gly Ser Ser Ser Leu Thr Asn Ile Pro Glu Glu Val Arg Glu His Val  
 290 295 300  
 Lys Leu Leu Leu Asn Val Thr Pro Thr Val Arg Pro Asp Ala Asp Gln  
 305 310 315 320  
 Met Thr Lys Ile Pro Phe Phe Asp Asp Val Gly Ala Val Thr Leu Gln  
 325 330 335  
 Tyr Phe Asp Thr Leu Phe Gln Arg Asp Asn Leu Gln Lys Ser Gln Phe  
 340 345 350  
 Phe Lys Gly Leu Pro Lys Val Leu Pro Lys Leu Pro Lys Arg Val Ile  
 355 360 365  
 Val Gln Arg Ile Leu Pro Cys Leu Thr Ser Glu Phe Val Asn Pro Asp  
 370 375 380  
 Met Val Pro Phe Val Leu Pro Asn Val Leu Leu Ile Ala Glu Glu Cys

385                      390                      395                      400  
Thr Lys Glu Glu Tyr Val Lys Leu Ile Leu Pro Glu Leu Gly Pro Val  
                         405                      410                      415  
Phe Lys Gln Gln Glu Pro Ile Gln Ile Leu Leu Ile Phe Leu Gln Lys  
                         420                      425                      430  
Met Asp Leu Leu Leu Thr Lys Thr Pro Pro Asp Glu Ile Lys Asn Ser  
                         435                      440                      445  
Val Leu Pro Met Val Tyr Arg Ala Leu Glu Ala Pro Ser Ile Gln Ile  
                         450                      455                      460  
Gln Glu Leu Cys Leu Asn Ile Ile Pro Thr Phe Ala Asn Leu Ile Asp  
465                      470                      475                      480  
Tyr Pro Ser Met Lys Asn Ala Leu Ile Pro Arg Ile Lys Asn Ala Cys  
                         485                      490                      495  
Leu Gln Thr Ser Ser Leu Ala Val Arg Val Asn Ser Leu Val Cys Leu  
                         500                      505                      510  
Gly Lys Ile Leu Glu Tyr Leu Asp Lys Trp Phe Val Leu Asp Asp Ile  
                         515                      520                      525  
Leu Pro Phe Leu Gln Gln Ile Pro Ser Lys Glu Pro Ala Val Leu Met  
                         530                      535                      540  
Gly Ile Leu Gly Ile Tyr Lys Cys Thr Phe Thr His Lys Lys Leu Gly  
545                      550                      555                      560  
Ile Thr Lys Glu Gln Leu Ala Gly Lys Val Leu Pro His Leu Ile Pro  
                         565                      570                      575  
Leu Ser Ile Glu Asn Asn Leu Asn Leu Asn Gln Leu Asn Ser Phe Ile  
                         580                      585                      590  
Ser Val Ile Lys Glu Met Leu Asn Arg Leu Glu Ser Glu His Lys Thr  
                         595                      600                      605  
Lys Leu Glu Gln Leu His Ile Met Gln Glu Gln Gln Lys Ser Leu Asp  
                         610                      615                      620



<210> 2872  
<211> 412  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 0

100	105	110
Trp Val Lys Gln Asn Ile Asn Arg Gln Gly Asn Ala Pro Val Ala Ser		
115	120	125
Gly Arg Tyr Cys Gln Pro Glu Glu Glu Val Ala Arg Leu Leu Thr Met		
130	135	140
Ala Gly Val Pro Glu Asp Glu Leu Asn Pro Phe His Val Leu Gly Val		
145	150	155
Glu Ala Thr Ala Ser Asp Val Glu Leu Lys Lys Ala Tyr Arg Gln Leu		
165	170	175
Ala Val Met Val His Pro Asp Lys Asn His His Pro Arg Ala Glu Glu		
180	185	190
Ala Phe Lys Val Leu Arg Ala Ala Trp Asp Ile Val Ser Asn Ala Glu		
195	200	205
Lys Arg Lys Glu Tyr Glu Met Lys Arg Met Ala Glu Asn Glu Leu Ser		
210	215	220
Arg Ser Val Asn Glu Phe Leu Ser Lys Leu Gln Asp Asp Leu Lys Glu		
225	230	235
Ala Met Asn Thr Met Met Cys Ser Arg Cys Gln Gly Lys His Arg Arg		
245	250	255
Phe Glu Met Asp Arg Glu Leu Lys Ser Ala Arg Tyr Cys Ala Glu Cys		
260	265	270
Asn Arg Leu His Pro Ala Glu Glu Gly Asp Phe Trp Ala Glu Ser Ser		
275	280	285
Met Leu Gly Leu Lys Ile Thr Tyr Phe Ala Leu Met Asp Gly Lys Val		
290	295	300
Tyr Asp Ile Thr Glu Trp Ala Gly Cys Gln Arg Val Gly Ile Ser Pro		
305	310	315
Asp Thr His Arg Val Pro Tyr His Ile Ser Phe Gly Ser Arg Ile Pro		
325	330	335

Gly Thr Arg Gly Arg Gln Arg Ala Thr Pro Asp Ala Pro Pro Ala Asp  
                   340                                  345                                  350  
 Leu Gln Asp Phe Leu Ser Arg Ile Phe Gln Val Pro Pro Gly Gln Met  
                   355                                  360                                  365  
 Pro Asn Gly Asn Phe Phe Ala Ala Pro Gln Pro Ala Pro Gly Ala Ala  
                   370                                  375                                  380  
 Ala Ala Ser Lys Pro Asn Ser Thr Val Pro Lys Gly Glu Ala Lys Pro  
 385                                  390                                  395                                  400  
 Lys Arg Arg Lys Lys Val Arg Arg Pro Phe Gln Arg  
                                   405                                  410

<210> 2873

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2873

Met Ala Leu Ala Asn Leu Ser Val Ala Met Ala Val Met Pro Phe Ile  
           1                                  5                                  10                                  15  
 Ser Val Thr Asp Leu Ile Gly Gly Lys Trp Ile Phe Gly His Phe Phe  
                                   20                                  25                                  30  
 Cys Asn Val Phe Ser Val Asn Val Met Cys Cys Thr Ala Trp Ile Leu  
                                   35                                  40                                  45  
 Thr Leu Tyr Val Ile Ser Ile Asp Arg Tyr Leu Gly Ile Met Lys Pro  
           50                                  55                                  60  
 Leu Thr Tyr Pro Met Arg Gln Lys Gly Lys Cys Met Thr Lys Met Ile  
           65                                  70                                  75                                  80  
 Leu Ser Val Cys Leu Leu Ser Ala Phe Val Thr Leu Pro Thr Ile Phe

	85	90	95
Gly Arg Ala Gln Asn Val Asn Asp Asp Lys Val Cys Leu Ala Arg Gln			
100	105	110	
Gln			

&lt;210&gt; 2874

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

Met His Tyr Lys Gln Val Leu Glu Arg Leu Cys Lys His Leu Pro Pro			
1	5	10	15
Ser His Ala Asp Phe Arg Asp Cys Arg Gly Glu Cys Trp Glu Pro Ala			
20	25	30	
Pro Pro Gly Ala His Ala Thr Val Gln Ala Gly Cys Ser Gln Thr Glu			
35	40	45	
Pro Ser Gln Gly Gly Ala Pro Arg Val Glu Arg Ser Ala Asp Ala Gly			
50	55	60	
Ser Gln Val Phe Ile Arg Val Gly Ala Gly Phe Tyr Ser Arg Ser Gly			
65	70	75	80
Val Trp Leu His Leu Asp Phe Phe Phe Phe Leu Arg Leu Ser Leu			
85	90	95	
Thr Leu Ser Pro Arg Leu Glu Cys Asn Gly Ala Ile Ser Ala His Cys			
100	105	110	
Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gly			
115	120	125	

Ala Ala Arg Ile Thr Gly Ala Arg His His Ala Arg Leu Ile Phe Val  
 130 135 140  
 Phe Leu Val Glu Thr Gly Phe His Arg Val Gly Gln Ala Gly Leu Glu  
 145 150 155 160  
 Leu Leu Thr Leu

<210> 2875

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2875

Met Phe Glu Thr Glu Ala Asp Glu Lys Arg Glu Met Ala Leu Glu Glu  
 1 5 10 15  
 Gly Lys Gly Pro Gly Ala Glu Asp Ser Pro Pro Ser Lys Glu Pro Ser  
 20 25 30  
 Pro Gly Gln Glu Leu Pro Pro Gly Gln Asp Leu Pro Pro Asn Lys Asp  
 35 40 45  
 Ser Pro Ser Gly Gln Glu Pro Ala Pro Ser Gln Glu Pro Leu Ser Ser  
 50 55 60  
 Lys Asp Ser Ala Thr Ser Glu Gly Ser Pro Pro Gly Pro Asp Ala Pro  
 65 70 75 80  
 Pro Ser Lys Asp Val Pro Pro Cys Gln Glu Pro Pro Pro Ala Gln Asp  
 85 90 95  
 Leu Ser Pro Cys Gln Asp Leu Pro Ala Gly Gln Glu Pro Leu Pro His  
 100 105 110  
 Gln Asp Pro Leu Leu Thr Lys Asp Leu Pro Ala Ile Gln Glu Ser Pro

115	120	125
Thr Arg Asp Leu Pro Pro Cys Gln Asp Leu Pro Pro Ser Gln Val Ser		
130	135	140
Leu Pro Ala Lys Ala Leu Thr Glu Asp Thr Met Ser Ser Gly Asp Leu		
145	150	155
Leu Ala Ala Thr Gly Asp Pro Pro Ala Ala Pro Arg Pro Ala Phe Val		
165	170	175
Ile Pro Glu Val Arg Leu Asp Ser Thr Tyr Ser Gln Lys Ala Gly Ala		
180	185	190
Glu Gln Gly Cys Ser Gly Asp Glu Glu Asp Ala Glu Glu Ala Glu Glu		
195	200	205
Val Glu Glu Gly Glu Glu Gly Glu Glu Asp Glu Asp Glu Asp Thr Ser		
210	215	220
Asp Asp Asn Tyr Gly Glu Arg Ser Glu Ala Lys Arg Ser Ser Met Ile		
225	230	235
Glu Thr Gly Gln Gly Ala Glu Gly Gly Leu Ser Leu Arg Val Gln Asn		
245	250	255
Ser Leu Arg Arg Arg Thr His Ser Glu Gly Ser Leu Leu Gln Glu Pro		
260	265	270
Arg Gly Pro Cys Phe Ala Ser Asp Thr Thr Leu His Cys Ser Asp Gly		
275	280	285
Glu Gly Ala Ala Ser Thr Trp Gly Met Pro Ser Pro Ser Thr Leu Lys		
290	295	300
Lys Glu Leu Gly Arg Asn Gly Gly Ser Met His His Leu Ser Leu Phe		
305	310	315
Phe Thr Gly His Arg Lys Met Ser Gly Ala Asp Thr Val Gly Asp Asp		
325	330	335
Asp Glu Ala Ser Arg Lys Arg Lys Ser Lys Asn Leu Tyr Val Gly Lys		
340	345	350

Ile Pro Gly Phe Cys Ala Pro Leu Pro Pro Leu Pro Gln Gly Leu Ser

355

360

365

Leu Leu

370

<210> 2876

<211> 438

<212> PRT

<213> Homo sapiens

<400> 2876

Met Met Tyr Ala Pro Val Glu Phe Ser Glu Ala Glu Phe Ser Arg Ala

1

5

10

15

Glu Tyr Gln Arg Lys Gln Gln Phe Trp Asp Ser Val Arg Leu Ala Leu

20

25

30

Phe Thr Leu Ala Ile Val Ala Ile Ile Gly Ile Ala Ile Gly Ile Val

35

40

45

Thr His Phe Val Val Glu Asp Asp Lys Ser Phe Tyr Tyr Leu Ala Ser

50

55

60

Phe Lys Val Thr Asn Ile Lys Tyr Lys Glu Asn Tyr Gly Ile Arg Ser

65

70

75

80

Ser Arg Glu Phe Ile Glu Arg Ser His Gln Ile Glu Arg Met Met Ser

85

90

95

Arg Ile Phe Arg His Ser Ser Val Gly Gly Arg Phe Ile Lys Ser His

100

105

110

Val Ile Lys Leu Ser Pro Asp Glu Gln Gly Val Asp Ile Leu Ile Val

115

120

125

Leu Ile Phe Arg Tyr Pro Ser Thr Asp Ser Ala Glu Gln Ile Lys Lys

130 135 140  
Lys Ile Glu Lys Ala Leu Tyr Gln Ser Leu Lys Thr Lys Gln Leu Ser  
145 150 155 160  
Leu Thr Leu Asn Lys Pro Ser Phe Arg Leu Thr Pro Ile Asp Ser Lys  
165 170 175  
Lys Met Arg Asn Leu Leu Asn Ser Arg Cys Gly Ile Arg Met Thr Ser  
180 185 190  
Ser Asn Met Pro Leu Pro Ala Ser Ser Ser Thr Gln Arg Ile Val Gln  
195 200 205  
Gly Arg Glu Thr Ala Met Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu  
210 215 220  
Gln Leu Ile Gly Ser Gly His Gln Cys Gly Ala Ser Leu Ile Ser Asn  
225 230 235 240  
Thr Trp Leu Leu Thr Ala Ala His Cys Phe Trp Lys Asn Lys Asp Pro  
245 250 255  
Thr Gln Trp Ile Ala Thr Phe Gly Ala Thr Ile Thr Pro Pro Ala Val  
260 265 270  
Lys Arg Asn Val Arg Lys Ile Ile Leu His Glu Asn Tyr His Arg Glu  
275 280 285  
Thr Asn Glu Asn Asp Ile Ala Leu Val Gln Leu Ser Thr Gly Val Glu  
290 295 300  
Phe Ser Asn Ile Val Gln Arg Val Cys Leu Pro Asp Ser Ser Ile Lys  
305 310 315 320  
Leu Pro Pro Lys Thr Ser Val Phe Val Thr Gly Phe Gly Ser Ile Val  
325 330 335  
Asp Asp Gly Pro Ile Gln Asn Thr Leu Arg Gln Ala Arg Val Glu Thr  
340 345 350  
Ile Ser Thr Asp Val Cys Asn Arg Lys Asp Val Tyr Asp Gly Leu Ile  
355 360 365



Thr Pro Gly Met Leu Cys Ala Gly Phe Met Glu Gly Lys Ile Asp Ala  
 370 375 380  
 Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Tyr Asp Asn His Asp Ile  
 385 390 395 400  
 Trp Tyr Ile Val Gly Ile Val Ser Trp Gly Gln Ser Cys Ala Leu Pro  
 405 410 415  
 Lys Lys Pro Gly Val Tyr Thr Arg Val Thr Lys Tyr Arg Asp Trp Ile  
 420 425 430  
 Ala Ser Lys Thr Gly Met  
 435

<210> 2877

<211> 273

<212> PRT

<213> Homo sapiens

<400> 2877

Met Val Gly Glu Ile Ala Ser Ala Ser Ala Cys Asp His Ala Asn Pro  
 1 5 10 15  
 Gln Leu Ser Asn Pro Ser Pro Phe Gln Thr Leu Gly Leu Asp Leu Val  
 20 25 30  
 Leu Glu Cys Val Ala Arg Tyr Gln Pro Lys Gln Arg Ser Met Phe Thr  
 35 40 45  
 Phe Val Cys Gly Gln Leu Phe Arg Arg Lys Glu Phe Ser Ser His Phe  
 50 55 60  
 Lys Asn Val His Gly Asp Ile His Ala Gly Leu Asn Gly Trp Met Glu  
 65 70 75 80  
 Gln Arg Cys Pro Leu Ala Tyr Tyr Gly Cys Thr Tyr Ser Gln Arg Arg

	85	90	95
Phe Cys Pro Ser Ile Gln Gly Ala Lys Ile Ile His Asp Arg Gln Leu			
100	105	110	
Arg Ser Phe Gly Val Gln Pro Cys Val Ser Thr Val Leu Val Glu Pro			
115	120	125	
Ala Arg Asn Cys Val Leu Gly Leu His Asn Asp His Leu Ser Ser Leu			
130	135	140	
Pro Phe Glu Val Leu Gln His Ile Ala Gly Phe Leu Asp Gly Phe Ser			
145	150	155	160
Leu Cys Gln Leu Ser Cys Val Ser Lys Leu Met Arg Asp Val Cys Gly			
165	170	175	
Ser Leu Leu Gln Ser Arg Gly Met Val Ile Leu Gln Trp Gly Lys Arg			
180	185	190	
Lys Tyr Pro Glu Gly Asn Ser Ser Trp Gln Ile Lys Glu Lys Val Trp			
195	200	205	
Arg Phe Ser Thr Ala Phe Cys Ser Val Asn Glu Trp Lys Phe Ala Asp			
210	215	220	
Ile Leu Ser Met Ala Asp His Leu Lys Lys Cys Ser Tyr Asn Val Val			
225	230	235	240
Glu Lys Arg Glu Glu Ala Ile Pro Leu Pro Cys Met Cys Val Thr Arg			
245	250	255	
Glu Leu Thr Lys Glu Gly Arg Ser Leu Arg Ser Val Leu Lys Pro Val			
260	265	270	
Leu			

&lt;210&gt; 2878

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2878

Met Ala Gly Trp Gly Leu Val Asp Val Ser Gly Ala Pro Glu Pro Trp

1 5 10 15

Arg Ile Pro His Gly Ile Pro Leu Pro Ala Leu Ser Gly Leu Cys Gly

20 25 30

Val Arg Arg Ser Pro Ser Ser Arg Phe Ser Phe Phe Pro Pro Gln Gln

35 40 45

Arg Asn Trp Arg Lys Asp Ile Lys Leu Ser Ala Val Asp Leu Ser Ala

50 55 60

Glu Ile Phe Pro Glu Ser Met Val Val Leu Asn Tyr Leu His Val Ser

65 70 75 80

Ser Ile Phe Asn Ser Gly Val Gly Leu Phe Leu Ile Ser Ser Gln Lys

85 90 95

Cys Ser Ala Leu Gly Glu Gly Thr Ser Pro Leu Ala Cys His Phe Pro

100 105 110

Gly Val Leu Tyr His Phe Asp Gly Thr Leu Trp Ser Ala Glu Asn Ala

115 120 125

Leu Ser Trp His Ala Ser Arg Leu

130 135

&lt;210&gt; 2879

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

Met Val Arg His Ser Gly Gly Gly Gly Leu Val Tyr Ile Tyr Asp Leu  
1 5 10 15  
Leu Lys Val Phe Gly Ile Phe Arg Glu Val Cys Phe Leu Phe Cys Phe  
20 25 30  
Leu Arg Leu Met Leu Pro Arg Leu Glu Cys Asn Gly Ala Val Leu Gly  
35 40 45  
Ser Leu Gln Pro Pro Pro Pro Gly Phe Arg Gly Phe Ser Cys Leu Ser  
50 55 60  
Phe Pro Gly Ser Trp Asp Tyr Arg Cys Met Pro Pro Cys Pro Ala Asn  
65 70 75 80  
Phe Cys Ile Phe Ser Arg Asp Gly Ile Ser Pro Cys Trp Pro Gly Trp  
85 90 95  
Ser His Thr Pro Asp Leu Arg  
100

&lt;210&gt; 2880

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2880

Met Glu Arg His Met Val Arg Gly Gln Leu Tyr Lys His Phe Asp Leu  
1 5 10 15  
Glu Arg Lys Asn Ala Lys Gln Ala Glu Ala Arg Leu Asp Gln Arg Leu  
20 25 30  
Gln Arg Leu Lys Val Ile Cys Leu Tyr His Val Lys Leu Leu Thr Trp  
35 40 45

Glu Gln Arg Gln Leu Gln Lys Glu Leu Gln Arg Leu Gln Gln Glu Thr  
50 55 60  
Met Lys Lys Lys Phe Ser Ser Tyr Leu Gly Asn Gly Phe Gln Lys Arg  
65 70 75 80  
Pro Glu Asp Val Leu Val Phe Ser Pro Gln Gly Arg Gln Lys His Arg  
85 90 95  
Ala Pro Gln Ala Lys Lys Met Arg Ala Leu Ala Thr Arg Met Ala Gln  
100 105 110  
Asp Thr Cys Lys Ser Lys Ser Gln Val Pro Pro Ser His Asp Ala Gly  
115 120 125  
Leu Lys Asp Pro Met Lys Ser Lys Lys Gln Pro Leu Ser Gln Asn Asn  
130 135 140  
Arg Thr Ala Cys Phe Ile Lys Glu Gln Pro Gln Ala Gln Glu Lys Asp  
145 150 155 160  
Ser Val Asn Pro Ser Lys Asp Val Asp Pro Ser Lys Gly Ile Ser Val  
165 170 175  
Pro Cys Gln Asn Gln Glu Val Ser Thr Asn Thr Ile Glu Gln Gly Pro  
180 185 190  
Ser Ser Ser Pro Ala Ser Gly Leu Gln Trp Gly Asp Asn Thr Leu  
195 200 205

&lt;210&gt; 2881

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2881

Met Asp Val Glu Gly Gly Leu Cys Gly Ala Val Leu Val Ser Trp Val

1                      5                      10                      15  
 Cys Pro Leu Pro Pro Phe Leu Leu Leu Leu Ser Ser Trp Thr Phe Ser  
                     20                      25                      30  
 Ala Ile Ala Val Leu Ser Phe Thr Leu His His Leu Asp Gly Met Ala  
                     35                      40                      45  
 Pro Ala Thr Lys His Leu Pro Gly Leu Arg Ser Ala Leu Pro Cys Leu  
                     50                      55                      60  
 Ala Ser Ala Thr Pro Thr Ser Gln Leu Gln Gly Met His Tyr Phe Tyr  
                     65                      70                      75                      80  
 Phe Lys Pro Ser Ala Ser Phe Leu Leu Ser Leu Gln Pro Pro Pro His  
                     85                      90                      95  
 Leu His Leu Leu Lys Asn Gly Arg Lys Lys Lys Leu  
                     100                      105

&lt;210&gt; 2882

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2882

Met Gln Ser Glu Asn Ala Ile Ser Pro Asp Leu Thr Leu Val Phe Asn  
 1                      5                      10                      15  
 Glu Lys Tyr Ile Leu Asn Gln Met Tyr Phe Leu Lys Lys Arg Val His  
                     20                      25                      30  
 Ser Ser Leu Ser Leu Ser Leu Ala Leu Ala Leu Ala Leu Ala Leu Ser  
                     35                      40                      45  
 Thr Gly Ser Leu Ser Leu Ser Phe His Gly Leu Pro Leu Met Pro Ser  
                     50                      55                      60

Arg Ser Trp Thr Val Leu Leu Pro Ser Arg Leu Thr Ala Thr Ser Leu  
 65 70 75 80  
 Pro Asp Ser Pro Ala Ser Ala Cys Arg Val Pro Ala Ile Ala Gly Ala  
 85 90 95  
 Cys Arg His Ala  
 100

<210> 2883

<211> 897

<212> PRT

<213> Homo sapiens

<400> 2883

Met Glu Val Ile Cys Tyr Gly Leu Thr Leu Pro Leu Asp Gly Glu Thr  
 1 5 10 15  
 Val Lys Tyr Cys Val Asp Val Tyr Thr Asp Trp Ile Met Ala Leu Val  
 20 25 30  
 Leu Pro Lys Asp Ser Ile Pro Leu Pro Val Ile Lys Glu Pro Asn Gln  
 35 40 45  
 Tyr Val Gln Thr Ile Leu Lys His Leu Gln Asn Leu Phe Val Pro Arg  
 50 55 60  
 Gln Glu Gln Gly Ser Ser Gln Ile Arg Leu Cys Leu Gln Val Leu Arg  
 65 70 75 80  
 Ala Ile Gln Lys Leu Ala Arg Glu Ser Ser Leu Met Ala Arg Glu Thr  
 85 90 95  
 Trp Glu Val Leu Leu Leu Phe Leu Leu Gln Ile Asn Asp Ile Leu Leu  
 100 105 110  
 Ala Pro Pro Thr Val Gln Gly Gly Ile Ala Glu Asn Leu Ala Glu Lys

115	120	125
Leu Ile Gly Val Leu Phe Glu Val Trp Leu Leu Ala Cys Thr Arg Cys		
130	135	140
Phe Pro Thr Pro Pro Tyr Trp Lys Thr Ala Lys Glu Met Val Ala Asn		
145	150	155
Trp Arg His His Pro Ala Val Val Glu Gln Trp Ser Lys Val Ile Cys		
165	170	175
Ala Leu Thr Ser Arg Leu Leu Arg Phe Thr Tyr Gly Pro Ser Phe Pro		
180	185	190
Ala Phe Lys Val Pro Asp Glu Asp Ala Ser Leu Ile Pro Pro Glu Met		
195	200	205
Asp Asn Glu Cys Val Ala Gln Thr Trp Phe Arg Phe Leu His Met Leu		
210	215	220
Ser Asn Pro Val Asp Leu Ser Asn Pro Ala Ile Ile Ser Ser Thr Pro		
225	230	235
Lys Phe Gln Glu Gln Phe Leu Asn Val Ser Gly Met Pro Gln Glu Leu		
245	250	255
Asn Gln Tyr Pro Cys Leu Lys His Leu Pro Gln Ile Phe Phe Arg Ala		
260	265	270
Met Arg Gly Ile Ser Cys Leu Val Asp Ala Phe Leu Gly Ile Ser Arg		
275	280	285
Pro Arg Ser Asp Ser Ala Pro Pro Thr Pro Val Asn Arg Leu Ser Met		
290	295	300
Pro Gln Ser Ala Ala Val Ser Thr Thr Pro Pro His Asn Arg Arg His		
305	310	315
Arg Ala Val Thr Val Asn Lys Ala Thr Met Lys Thr Ser Thr Val Ser		
325	330	335
Thr Ala His Ala Ser Lys Val Gln His Gln Thr Ser Ser Thr Ser Pro		
340	345	350



Leu Ser Ser Pro Asn Gln Thr Ser Ser Glu Pro Arg Pro Leu Pro Ala  
355 360 365  
Pro Arg Arg Pro Lys Val Asn Ser Ile Leu Asn Leu Phe Gly Ser Trp  
370 375 380  
Leu Phe Asp Ala Ala Phe Val His Cys Lys Leu His Asn Gly Ile Asn  
385 390 395 400  
Arg Asp Ser Ser Met Thr Ala Ile Thr Thr Gln Ala Ser Met Glu Phe  
405 410 415  
Arg Arg Lys Gly Ser Gln Met Ser Thr Asp Thr Met Val Ser Asn Pro  
420 425 430  
Met Phe Asp Ala Ser Glu Phe Pro Asp Asn Tyr Glu Ala Gly Arg Ala  
435 440 445  
Glu Ala Cys Gly Thr Leu Cys Arg Ile Phe Cys Ser Lys Lys Thr Gly  
450 455 460  
Glu Glu Ile Leu Pro Ala Tyr Leu Ser Arg Phe Tyr Met Leu Leu Ile  
465 470 475 480  
Gln Gly Leu Gln Ile Asn Asp Tyr Val Cys His Pro Val Leu Ala Ser  
485 490 495  
Val Ile Leu Asn Ser Pro Pro Leu Phe Cys Cys Asp Leu Lys Gly Ile  
500 505 510  
Asp Val Val Val Pro Tyr Phe Ile Ser Ala Leu Glu Thr Ile Leu Pro  
515 520 525  
Asp Arg Glu Leu Ser Lys Phe Lys Ser Tyr Val Asn Pro Thr Glu Leu  
530 535 540  
Arg Arg Ser Ser Ile Asn Ile Leu Leu Ser Leu Leu Pro Leu Pro His  
545 550 555 560  
His Phe Gly Thr Val Lys Ser Glu Val Val Leu Glu Gly Lys Phe Ser  
565 570 575  
Asn Asp Asp Ser Ser Ser Tyr Asp Lys Pro Ile Thr Phe Leu Ser Leu

580	585	590
Lys Leu Arg Leu Val Asn Ile Leu Ile Gly Ala Leu Gln Thr Glu Thr		
595	600	605
Asp Pro Asn Asn Thr Gln Met Ile Leu Gly Ala Met Leu Asn Ile Val		
610	615	620
Gln Asp Ser Ala Leu Leu Glu Ala Ile Gly Cys Gln Met Glu Met Gly		
625	630	635
Gly Gly Glu Asn Asn Leu Lys Ser His Ser Arg Thr Asn Ser Gly Ile		
645	650	655
Ser Ser Ala Ser Gly Gly Ser Thr Glu Pro Thr Thr Pro Asp Ser Glu		
660	665	670
Arg Pro Ala Gln Ala Leu Leu Arg Asp Tyr Ala Leu Asn Thr Asp Ser		
675	680	685
Ala Ala Gly Leu Leu Ile Arg Ser Ile His Leu Val Thr Gln Arg Leu		
690	695	700
Asn Ser Gln Trp Arg Gln Asp Met Ser Ile Ser Leu Ala Ala Leu Glu		
705	710	715
Leu Leu Ser Gly Leu Ala Lys Val Lys Val Met Val Asp Ser Gly Asp		
725	730	735
Arg Lys Arg Ala Ile Ser Ser Val Cys Thr Tyr Ile Val Tyr Gln Cys		
740	745	750
Ser Arg Pro Ala Pro Leu His Ser Arg Asp Leu His Ser Met Ile Val		
755	760	765
Ala Ala Phe Gln Cys Leu Cys Val Trp Leu Thr Glu His Pro Asp Met		
770	775	780
Leu Asp Glu Lys Asp Cys Leu Lys Glu Val Leu Glu Ile Val Glu Leu		
785	790	795
Gly Ile Ser Gly Ser Lys Ser Lys Asn Asn Glu Gln Glu Val Lys Tyr		
805	810	815

Lys Gly Asp Lys Glu Pro Asn Pro Ala Ser Met Arg Val Lys Asp Ala  
                     820                    825                    830  
 Ala Glu Ala Thr Leu Thr Cys Ile Met Gln Leu Leu Gly Ala Phe Pro  
                     835                    840                    845  
 Ser Pro Ser Gly Pro Ala Ser Pro Cys Ser Leu Val Asn Glu Thr Thr  
                     850                    855                    860  
 Leu Ile Lys Tyr Ser Arg Leu Pro Thr Ile Asn Lys Gln Leu Glu Pro  
                     865                    870                    875                    880  
 Glu Phe Tyr Thr Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser  
                     885                    890                    895  
 Ser

<210> 2884

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2884

Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu  
           1                    5                    10                    15  
 Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr  
                     20                    25                    30  
 Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu  
                     35                    40                    45  
 Asp Leu Gly Tyr Leu Ala Glu Glu Ile Ser Lys Gln Gln Ser Val Gln  
                     50                    55                    60  
 Asp Val Ala Trp Leu Leu Leu Val Val Cys Ala His Ile Cys Glu Gln

65	70	75	80
Arg His Asp Lys Lys Leu Glu Leu Ile Phe Lys Lys Glu Ala Glu Cys			
	85	90	95
Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys Lys			
	100	105	110
Thr Ile Phe Trp Arg Gly Ile Gln Ala Ser Cys Arg Lys Leu Gln Val			
	115	120	125
Thr Arg Ser Lys Met Leu Ile Ala Lys Ile Val Gly Lys Thr Pro			
	130	135	140

&lt;210&gt; 2885

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2885

Met Ser Lys Arg Tyr Leu Gln Lys Ala Thr Lys Gly Lys Leu Leu Ile			
1	5	10	15
Ile Ile Phe Ile Val Thr Leu Trp Gly Lys Val Val Ser Ser Ala Asn			
	20	25	30
His His Lys Ala His His Val Lys Thr Gly Thr Cys Glu Val Val Ala			
	35	40	45
Leu His Arg Cys Cys Asn Lys Asn Lys Ile Glu Glu Arg Ser Gln Thr			
	50	55	60
Val Lys Cys Ser Cys Phe Pro Gly Gln Val Ala Gly Thr Thr Arg Ala			
	65	70	75
Ala Pro Ser Cys Val Asp Ala Ser Ile Val Glu Gln Lys Trp Trp Cys			
	85	90	95

His Met Gln Pro Cys Leu Glu Gly Glu Glu Cys Lys Val Leu Pro Asp  
 100 105 110  
 Arg Lys Gly Trp Ser Cys Ser Ser Gly Asn Lys Val Lys Thr Thr Arg  
 115 120 125  
 Val Thr His  
 130

<210> 2886

<211> 275

<212> PRT

<213> Homo sapiens

<400> 2886

Met Gly Ala Pro His Trp Trp Asp Gln Leu Gln Ala Gly Ser Ser Glu  
 1 5 10 15  
 Val Asp Trp Cys Glu Asp Asn Tyr Thr Ile Val Pro Ala Ile Ala Glu  
 20 25 30  
 Phe Tyr Asn Thr Ile Ser Asn Val Leu Phe Phe Ile Leu Pro Pro Ile  
 35 40 45  
 Cys Met Cys Leu Phe Arg Gln Tyr Ala Thr Cys Phe Asn Ser Gly Ile  
 50 55 60  
 Tyr Leu Ile Trp Thr Leu Leu Val Val Val Gly Ile Gly Ser Val Tyr  
 65 70 75 80  
 Phe His Ala Thr Leu Ser Phe Leu Gly Gln Met Leu Asp Glu Leu Ala  
 85 90 95  
 Val Leu Trp Val Leu Met Cys Ala Leu Ala Met Trp Phe Pro Arg Arg  
 100 105 110  
 Tyr Leu Pro Lys Ile Phe Arg Asn Asp Arg Gly Arg Phe Lys Val Val

115 120 125  
Val Ser Val Leu Ser Ala Val Thr Thr Cys Pro Ala Phe Val Lys Pro  
130 135 140  
Ala Ile Asn Asn Ile Ser Leu Met Thr Leu Gly Val Pro Cys Thr Ala  
145 150 155 160  
Leu Leu Ile Ala Glu Leu Lys Arg Cys Asp Asn Met Arg Val Phe Lys  
165 170 175  
Leu Gly Leu Phe Ser Gly Leu Trp Trp Thr Leu Ala Leu Phe Cys Trp  
180 185 190  
Ile Ser Asp Arg Ala Phe Cys Glu Leu Leu Ser Ser Phe Asn Phe Pro  
195 200 205  
Tyr Leu His Cys Met Trp His Ile Leu Ile Cys Leu Ala Ala Tyr Leu  
210 215 220  
Gly Cys Val Cys Phe Ala Tyr Phe Asp Ala Ala Ser Glu Ile Pro Glu  
225 230 235 240  
Gln Gly Pro Val Ile Lys Phe Trp Pro Asn Glu Lys Trp Ala Phe Ile  
245 250 255  
Gly Val Pro Tyr Val Ser Leu Leu Cys Ala Asn Lys Lys Ser Ser Val  
260 265 270  
Lys Ile Thr  
275

&lt;210&gt; 2887

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2887

Met Phe Ser Ala Pro Gly Arg Glu Thr Ala Gly Asp Val Leu Met Leu  
 1 5 10 15  
 Arg Trp Phe Val Gln Gln Pro Thr Ser Cys Ser His Ala Gln Pro Leu  
 20 25 30  
 Pro Pro Pro His Gly Thr Ala Ser Leu Ser Pro Leu Val Pro Ser Cys  
 35 40 45  
 Gly Ser Ala Ala Trp Pro Ser Leu His Tyr Leu Gly Ser Pro Ala Asp  
 50 55 60  
 Ser Gly Cys Ser Arg Gly Gln Arg Ala Leu Pro Ala Val Trp Pro Pro  
 65 70 75 80  
 Ser Cys Tyr Ser Gln Cys Pro Gln Gly Arg Pro Pro His Pro Val Pro  
 85 90 95  
 Arg Ser Pro Arg Arg Gly Ser Arg Asp Leu Gly Lys Glu Pro Gly Glu  
 100 105 110  
 Glu Ala Ala Pro Trp Pro Ser Pro Cys Asp Ser Arg Leu Tyr Arg His  
 115 120 125  
 Pro Met Pro Arg Thr Pro Leu Ser Ala Ser Ala Gly Cys Asp Pro Ser  
 130 135 140  
 Leu Ile Gln Pro Ser Pro His Pro Thr Pro Pro Gln Gln Gly Cys Val  
 145 150 155 160  
 Thr Pro Phe His Arg  
 165

&lt;210&gt; 2888

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

Met Gly Asn Ser Leu Ser Ile Arg Pro Asp Ser Thr Met Gly Asn Ser  
 1 5 10 15  
 Thr Pro Val Pro Pro Asp Ser Ser Leu Gly Tyr Ile Ile His His Trp  
 20 25 30  
 Asn Gln Phe Asp Pro Asp Thr Leu Lys Gly Lys Cys Ile Ile Phe Phe  
 35 40 45  
 Cys Asn Thr Val Trp Pro His Tyr Glu Leu Pro Ser Pro Gln Gln Trp  
 50 55 60  
 Ala Val Ser Gly Ser Leu Asn Tyr Asp Thr Ile Leu Gln Leu Asp Leu  
 65 70 75 80  
 Leu Cys Lys Arg Leu Gly Arg Trp Ser Glu Val Pro Tyr Val Gln Ala  
 85 90 95  
 Leu Val Cys Asp Val Pro Leu Pro Val Ser Met Cys Ser His Cys Ser  
 100 105 110  
 Pro Pro Thr Tyr  
 115

&lt;210&gt; 2889

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2889

Met Glu His Met Leu Leu Ala Asn His Thr Asp Lys Ala Thr Phe Thr  
 1 5 10 15  
 Gly Thr Gln Arg Gln Arg Ser Cys Ser Gly Ala Ser Val Ser Gln Pro  
 20 25 30



Arg Pro Leu Arg Gly Lys Leu Val Gly Tyr Trp Asp Pro His Ser Arg  
 35 40 45  
 Leu Leu Ser Arg Gly Arg Ala Leu Gly Ser Val Ser Ala Pro Ser Thr  
 50 55 60  
 Pro Arg Gly Arg Gly Trp Lys Ala Thr Phe Asp Gly Cys Ile Leu His  
 65 70 75 80  
 Asp Asp Leu Leu Thr Lys Val His Gly Phe Gln Ser Leu Ile Gly Leu  
 85 90 95  
 Gln Gln His Leu Ala Cys Gly Asp Ser Gly Ser Leu Met Lys Asn Cys  
 100 105 110  
 His Asp Val Arg Lys Ser Leu Ser Glu Arg Gly Trp Gly Ala Ala Cys  
 115 120 125  
 Trp Gly Gly Gly Gly Val Ala Ser Arg Glu Lys Leu His Pro Leu Ala  
 130 135 140  
 Glu Ser Gly Thr  
 145

<210> 2890

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2890

Met Gly Leu Gly Arg Cys Trp Arg Arg Val Leu Val Leu Pro Gly Lys  
 1 5 10 15  
 Val Leu Pro Pro Leu Val Ala Trp Ile Lys Tyr His Phe Cys Lys Ser  
 20 25 30  
 His Tyr Ala Gln Ala Glu Met Ala Phe Pro Ser Ser Gly Leu Pro Cys

35                      40                      45  
 Cys Ser Thr Cys Phe Pro Leu Arg Thr Cys Asp Val Thr Pro Gly Leu  
 50                      55                      60  
 Cys Pro Ser Pro Gly Lys Thr Gly Asn Pro Phe Arg Ala Gly Gly Val  
 65                      70                      75                      80  
 Pro Val Leu Val Leu Cys Ala Val Thr Pro Ala Gln Cys Leu Ala His  
 85                      90                      95  
 Thr Arg Trp Leu Cys Arg Cys Pro Ala Ala  
 100                      105

<210> 2891

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2891

Met Tyr Met Tyr Leu Lys Asn Ile Ser Leu Cys His Ile Lys His Ala  
 1                      5                      10                      15  
 Phe Phe Pro Cys Val Cys Val Cys Val Phe Ser Gly Gln Met Tyr Gln  
 20                      25                      30  
 Gln Tyr Gln Gln Gln Ala Gly Tyr Gly Ala Gln Gln Pro Gln Ala Pro  
 35                      40                      45  
 Pro Gln Gln Pro Gln Gln Tyr Gly Ile Gln Tyr Ser Ala Ser Tyr Ser  
 50                      55                      60  
 Gln Gln Thr Gly Pro Gln Gln Pro Gln Gln Phe Gln Gly Tyr Gly Gln  
 65                      70                      75                      80  
 Gln Pro Thr Ser Gln Ala Pro Ala Pro Ala Phe Ser Gly Gln Pro Gln  
 85                      90                      95

Gln Leu Pro Ala Gln Pro Pro Gln Gln Tyr Gln Ala Ser Asn Tyr Pro  
100 105 110  
Ala Gln Thr Tyr Thr Ala Gln Thr Ser Gln Pro Thr Asn Tyr Thr Val  
115 120 125  
Ala Pro Ala Ser Gln Pro Gly Met Ala Pro Ser Gln Pro Gly Ala Tyr  
130 135 140  
Gln Pro Arg Pro Gly Phe Thr Ser Leu Pro Gly Ser Thr Met Thr Pro  
145 150 155 160  
Pro Pro Ser Gly Pro Asn Pro Tyr Ala Arg Asn Arg Pro Pro Phe Gly  
165 170 175  
Gln Gly Tyr Thr Gln Pro Gly Pro Gly Tyr Arg  
180 185

&lt;210&gt; 2892

&lt;211&gt; 437

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2892

Met Lys Val Asp Arg Thr Lys Leu Lys Lys Thr Pro Thr Glu Ala Pro  
1 5 10 15  
Ala Asp Cys Arg Ala Leu Ile Asp Lys Leu Lys Val Cys Asn Asp Glu  
20 25 30  
Gln Leu Leu Leu Glu Leu Gln Gln Ile Lys Thr Trp Asn Ile Gly Lys  
35 40 45  
Cys Glu Leu Tyr His Trp Val Asp Leu Leu Asp Arg Phe Asp Gly Ile  
50 55 60  
Leu Ala Asp Ala Gly Gln Thr Val Glu Asn Met Ser Trp Met Leu Val

65	70	75	80
Cys Asp Arg Pro Glu Arg Glu Gln Leu Lys Met Leu Leu Leu Ala Val			
	85	90	95
Leu Asn Phe Thr Ala Leu Leu Ile Glu Tyr Ser Phe Ser Arg His Leu			
	100	105	110
Tyr Ser Ser Ile Glu His Leu Thr Thr Leu Leu Ala Ser Ser Asp Met			
	115	120	125
Gln Val Val Leu Glu Val Ala Ala Gly Met Ala Ala Ala Met Pro Leu			
	130	135	140
Ala Leu Leu Val Leu Leu Leu Leu Gly Pro Gly Gly Trp Cys Leu Ala			
145	150	155	160
Glu Pro Pro Arg Asp Ser Leu Arg Glu Glu Leu Val Ile Thr Pro Leu			
	165	170	175
Pro Ser Gly Asp Val Ala Ala Thr Phe Gln Phe Arg Thr Arg Trp Asp			
	180	185	190
Ser Glu Leu Gln Arg Glu Gly Val Ser His Tyr Arg Leu Phe Pro Lys			
	195	200	205
Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu Leu His Leu			
	210	215	220
Ser Phe Thr Gln Gly Phe Trp Arg Thr Arg Tyr Trp Gly Pro Pro Phe			
225	230	235	240
Leu Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe Gln Asp Thr			
	245	250	255
Val Thr Asp Val Asp Lys Ser Trp Lys Glu Leu Ser Asn Val Leu Ser			
	260	265	270
Gly Ile Phe Cys Ala Ser Leu Asn Phe Ile Asp Ser Thr Asn Thr Val			
	275	280	285
Thr Pro Thr Ala Ser Phe Lys Pro Leu Gly Leu Ala Asn Asp Thr Asp			
	290	295	300

出証特 2 0 0 4 - 3 0 5 9 6 6 0

20	25	30
Thr Ile Gly Lys Ile Ser Ala Ala Ser Lys Met Met Trp Cys Ser Ala		
35	40	45
Ala Val Asp Ile Met Phe Leu Leu Asp Gly Ser Asn Ser Val Gly Lys		
50	55	60
Gly Ser Phe Glu Arg Ser Lys His Phe Ala Ile Thr Val Cys Asp Gly		
65	70	75
Leu Asp Ile Ser Pro Glu Arg Val Arg Val Gly Ala Phe Gln Phe Ser		
85	90	95
Ser Thr Pro His Leu Glu Phe Pro Leu Asp Ser Phe Ser Thr Gln Gln		
100	105	110
Glu Val Lys Ala Arg Ile Lys Arg Met Val Phe Lys Gly Gly Arg Thr		
115	120	125
Glu Thr Glu Leu Ala Leu Lys Tyr Leu Leu His Arg Gly Leu Pro Gly		
130	135	140
Gly Arg Asn Ala Ser Val Pro Gln Ile Leu Ile Ile Val Thr Asp Gly		
145	150	155
Lys Ser Gln Gly Asp Val Ala Leu Pro Ser Lys Gln Leu Lys Glu Arg		
165	170	175
Gly Val Thr Val Phe Ala Val Gly Val Arg Phe Pro Arg Trp Glu Glu		
180	185	190
Leu His Ala Leu Ala Ser Glu Pro Arg Gly Gln His Val Leu Leu Ala		
195	200	205
Glu Gln Val Glu Asp Ala Thr Asn Gly Leu Phe Ser Thr Leu Ser Ser		
210	215	220
Ser Ala Ile Cys Ser Ser Ala Thr Pro Asp Cys Arg Val Glu Ala His		
225	230	235
Pro Cys Glu His Arg Thr Leu Glu Met Val Arg Glu Phe Ala Gly Asn		
245	250	255

Ala Pro Cys Trp Arg Gly Ser Arg Arg Thr Leu Ala Val Leu Ala Ala  
260 265 270  
His Cys Pro Phe Tyr Ser Trp Lys Arg Val Phe Leu Thr His Pro Ala  
275 280 285  
Thr Cys Tyr Arg Thr Thr Cys Pro Gly Pro Cys Asp Ser Gln Pro Cys  
290 295 300  
Gln Asn Gly Gly Thr Cys Val Pro Glu Gly Leu Asp Gly Tyr Gln Cys  
305 310 315 320  
Leu Cys Pro Leu Ala Phe Gly Gly Glu Ala Asn Cys Ala Leu Lys Leu  
325 330 335  
Ser Leu Glu Cys Arg Val Asp Leu Leu Phe Leu Leu Asp Ser Ser Ala  
340 345 350  
Gly Thr Thr Leu Asp Gly Phe Leu Arg Ala Lys Val Phe Val Lys Arg  
355 360 365  
Phe Val Arg Ala Val Leu Ser Glu Asp Ser Arg Ala Arg Val Gly Val  
370 375 380  
Ala Thr Tyr Ser Arg Glu Leu Leu Val Ala Val Pro Val Gly Glu Tyr  
385 390 395 400  
Gln Asp Val Pro Asp Leu Val Trp Ser Leu Asp Gly Ile Pro Phe Arg  
405 410 415  
Gly Gly Pro Thr Leu Thr Gly Ser Ala Leu Arg Gln Ala Ala Glu Arg  
420 425 430  
Gly Phe Gly Ser Ala Thr Arg Thr Gly Gln Asp Arg Pro Arg Arg Val  
435 440 445  
Val Val Leu Leu Thr Glu Ser His Ser Glu Asp Glu Val Ala Gly Pro  
450 455 460  
Ala Arg His Ala Arg Ala Arg Glu Leu Leu Leu Leu Gly Val Gly Ser  
465 470 475 480  
Glu Ala Val Arg Ala Glu Leu Glu Glu Ile Thr Gly Ser Pro Lys His

485	490	495
Val Met Val Tyr Ser Asp Pro Gln Asp Leu Phe Asn Gln Ile Pro Glu		
500	505	510
Leu Gln Gly Lys Leu Cys Ser Arg Gln Arg Pro Gly Cys Arg Thr Gln		
515	520	525
Ala Leu Asp Leu Val Phe Met Leu Asp Thr Ser Ala Ser Val Gly Pro		
530	535	540
Glu Asn Phe Ala Gln Met Gln Ser Phe Val Arg Ser Cys Ala Leu Gln		
545	550	555
Phe Glu Val Asn Pro Asp Val Thr Gln Val Gly Leu Val Val Tyr Gly		
565	570	575
Ser Gln Val Gln Thr Ala Phe Gly Leu Asp Thr Lys Pro Thr Arg Ala		
580	585	590
Ala Met Leu Arg Ala Ile Ser Gln Ala Pro Tyr Leu Gly Gly Val Gly		
595	600	605
Ser Ala Gly Thr Ala Leu Leu His Ile Tyr Asp Lys Val Met Thr Val		
610	615	620
Gln Arg Gly Ala Arg Pro Gly Val Pro Lys Ala Val Val Val Leu Thr		
625	630	635
Gly Gly Arg Gly Ala Glu Asp Ala Ala Val Pro Ala Gln Lys Leu Arg		
645	650	655
Asn Asn Gly Ile Ser Val Leu Val Val Gly Val Gly Pro Val Leu Ser		
660	665	670
Glu Gly Leu Arg Arg Leu Ala Gly Pro Arg Asp Ser Leu Ile His Val		
675	680	685
Ala Ala Tyr Ala Asp Leu Arg Tyr His Gln Asp Val Leu Ile Glu Trp		
690	695	700
Leu Cys Gly Gly Glu Trp Gly Asn Pro His Pro Gln Gly Cys Pro His		
705	710	715
		720



Gly Arg Pro Ser Ala

725

&lt;210&gt; 2894

&lt;211&gt; 689

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

Met Ser Phe Cys Thr Ser Gln Ser Arg Gly Phe Gly Leu Ser Pro Thr

1 5 10 15

Val Gly Leu Thr Ala Phe Lys Pro Phe Phe Val Asp Leu Thr Leu Pro

20 25 30

Tyr Ser Val Val Arg Gly Glu Ser Phe Arg Leu Thr Ala Thr Ile Phe

35 40 45

Asn Tyr Leu Lys Asp Cys Ile Arg Val Gln Thr Asp Leu Ala Lys Ser

50 55 60

His Glu Tyr Gln Leu Glu Ser Trp Ala Asp Ser Gln Thr Ser Ser Cys

65 70 75 80

Leu Cys Ala Asp Glu Ala Lys Thr His His Trp Asn Ile Thr Ala Val

85 90 95

Lys Leu Gly His Ile Asn Phe Thr Ile Ser Thr Lys Ile Leu Asp Ser

100 105 110

Asn Glu Pro Cys Gly Gly Gln Lys Gly Phe Val Pro Gln Lys Gly Arg

115 120 125

Ser Asp Thr Leu Ile Lys Pro Val Leu Val Lys Pro Glu Gly Val Leu

130 135 140

Val Glu Lys Thr His Ser Ser Leu Leu Cys Pro Lys Gly Lys Val Ala

145	150	155	160
Ser Glu Ser Val	Ser Leu Glu Leu Pro Val	Asp Ile Val Pro	Asp Ser
165	170	175	
Thr Lys Ala Tyr Val	Thr Val Leu Gly Asp Ile Met Gly Thr	Ala Leu	
180	185	190	
Gln Asn Leu Asp Gly Leu Val	Gln Met Pro Ser Gly Cys Gly Glu Gln		
195	200	205	
Asn Met Val Leu Phe Ala Pro Ile Ile Tyr Val	Leu Gln Tyr Leu Glu		
210	215	220	
Lys Ala Gly Leu Leu Thr Glu Glu Ile Arg Ser Arg Ala Val Gly Phe			
225	230	235	240
Leu Glu Ile Gly Tyr Gln Lys Glu Leu Met Tyr Lys His Ser Asn Gly			
245	250	255	
Ser Tyr Ser Ala Phe Gly Glu Arg Asp Gly Asn Gly Asn Thr Trp Leu			
260	265	270	
Thr Ala Phe Val Thr Lys Cys Phe Gly Gln Ala Gln Lys Phe Ile Phe			
275	280	285	
Ile Asp Pro Lys Asn Ile Gln Asp Ala Leu Lys Trp Met Ala Gly Asn			
290	295	300	
Gln Leu Pro Ser Gly Cys Tyr Ala Asn Val Gly Asn Leu Leu His Thr			
305	310	315	320
Ala Met Lys Gly Gly Val Asp Asp Glu Val Ser Leu Thr Ala Tyr Val			
325	330	335	
Thr Ala Ala Leu Leu Glu Met Gly Lys Asp Val Asp Asp Pro Met Val			
340	345	350	
Ser Gln Gly Leu Trp Cys Leu Lys Asn Ser Ala Thr Ser Thr Thr Asn			
355	360	365	
Leu Tyr Thr Gln Ala Leu Leu Ala Tyr Ile Phe Ser Leu Ala Gly Glu			
370	375	380	

Met Asp Ile Arg Asn Ile Leu Leu Lys Gln Leu Asp Gln Gln Ala Ile  
385 390 395 400  
Ile Ser Gly Glu Ser Ile Tyr Trp Ser Gln Lys Pro Thr Pro Ser Ser  
405 410 415  
Asn Ala Ser Pro Trp Ser Glu Pro Ala Ala Val Asp Val Glu Leu Thr  
420 425 430  
Ala Tyr Ala Leu Leu Ala Gln Leu Thr Lys Pro Ser Leu Thr Gln Lys  
435 440 445  
Glu Ile Ala Lys Ala Thr Ser Ile Val Ala Trp Leu Ala Lys Gln Arg  
450 455 460  
Asn Ala Tyr Gly Gly Phe Ser Ser Thr Gln Asp Thr Val Val Ala Leu  
465 470 475 480  
Gln Ala Leu Ala Lys Tyr Ala Thr Thr Ala Tyr Val Pro Ser Glu Glu  
485 490 495  
Ile Asn Leu Val Val Lys Ser Thr Glu Asn Phe Gln Arg Thr Phe Asn  
500 505 510  
Ile Gln Ser Val Asn Arg Leu Val Phe Gln Gln Asp Thr Leu Pro Asn  
515 520 525  
Val Pro Gly Met Tyr Thr Leu Glu Ala Ser Gly Gln Gly Cys Val Tyr  
530 535 540  
Val Gln Thr Val Leu Arg Tyr Asn Ile Leu Pro Pro Thr Asn Met Lys  
545 550 555 560  
Thr Phe Ser Leu Ser Val Glu Ile Gly Lys Ala Arg Cys Glu Gln Pro  
565 570 575  
Thr Ser Pro Arg Ser Leu Thr Leu Thr Ile His Thr Ser Tyr Val Gly  
580 585 590  
Ser Arg Ser Ser Ser Asn Met Ala Ile Val Glu Val Lys Met Leu Ser  
595 600 605  
Gly Phe Ser Pro Met Glu Gly Thr Asn Gln Leu Leu Leu Gln Gln Pro

610                      615                      620  
 Leu Val Lys Lys Val Glu Phe Gly Thr Asp Thr Leu Asn Ile Tyr Leu  
 625                      630                      635                      640  
 Asp Glu Leu Ile Lys Asn Thr Gln Thr Tyr Thr Phe Thr Ile Ser Gln  
                         645                      650                      655  
 Ser Val Leu Val Thr Asn Leu Lys Pro Ala Thr Ile Lys Val Tyr Asp  
                         660                      665                      670  
 Tyr Tyr Leu Pro Asp Glu Gln Ala Thr Ile Gln Tyr Ser Asp Pro Cys  
                         675                      680                      685  
 Glu

<210> 2895

<211> 954

<212> PRT

<213> Homo sapiens

<400> 2895

Met Glu Gly Gln Lys His Leu Asn Ser Lys Lys Lys Gly Leu Lys Ala  
     1                      5                      10                      15  
 Ser Phe Ser Leu Ser Leu Thr Phe Thr Ser Arg Leu Ala Pro Asp Pro  
                         20                      25                      30  
 Ser Leu Val Ile Tyr Ala Ile Phe Pro Ser Gly Gly Val Val Ala Asp  
                         35                      40                      45  
 Lys Ile Gln Phe Ser Val Glu Met Cys Phe Asp Asn Gln Val Ser Leu  
                         50                      55                      60  
 Gly Phe Ser Pro Ser Gln Gln Leu Pro Gly Ala Glu Val Glu Leu Gln  
                         65                      70                      75                      80

Leu Gln Ala Ala Pro Gly Ser Leu Cys Ala Leu Arg Ala Val Asp Glu  
85 90 95  
Ser Val Leu Leu Leu Arg Pro Asp Arg Glu Leu Ser Asn Arg Ser Val  
100 105 110  
Tyr Gly Met Phe Pro Phe Trp Tyr Gly His Tyr Pro Tyr Gln Val Ala  
115 120 125  
Glu Tyr Asp Gln Cys Pro Val Ser Gly Pro Trp Asp Phe Pro Gln Pro  
130 135 140  
Leu Ile Asp Pro Met Pro Gln Gly His Ser Ser Gln Arg Ser Ile Ile  
145 150 155 160  
Trp Arg Pro Ser Phe Ser Glu Gly Thr Asp Leu Phe Ser Phe Phe Arg  
165 170 175  
Asp Val Gly Leu Lys Ile Leu Ser Asn Ala Lys Ile Lys Lys Pro Val  
180 185 190  
Asp Cys Ser His Arg Ser Pro Glu Tyr Ser Thr Ala Met Gly Ala Gly  
195 200 205  
Gly Gly His Pro Glu Ala Phe Glu Ser Ser Thr Pro Leu His Gln Ala  
210 215 220  
Glu Asp Ser Gln Val Arg Gln Tyr Leu Pro Glu Thr Trp Leu Trp Asp  
225 230 235 240  
Leu Phe Pro Ile Gly Asn Ser Gly Lys Glu Ala Val His Val Thr Val  
245 250 255  
Pro Asp Ala Ile Thr Glu Trp Lys Ala Met Ser Phe Cys Thr Ser Gln  
260 265 270  
Ser Arg Gly Phe Gly Leu Ser Pro Thr Val Gly Leu Thr Ala Phe Lys  
275 280 285  
Pro Phe Phe Val Asp Leu Thr Leu Pro Tyr Ser Val Val Arg Gly Glu  
290 295 300  
Ser Phe Arg Leu Thr Ala Thr Ile Phe Asn Tyr Leu Lys Asp Cys Ile

305                      310                      315                      320  
Arg Val Gln Thr Asp Leu Ala Lys Ser His Glu Tyr Gln Leu Glu Ser  
                         325                      330                      335  
Trp Ala Asp Ser Gln Thr Ser Ser Cys Leu Cys Ala Asp Glu Ala Lys  
                         340                      345                      350  
Thr His His Trp Asn Ile Thr Ala Val Lys Leu Gly His Ile Asn Phe  
                         355                      360                      365  
Thr Ile Ser Thr Lys Ile Leu Asp Ser Asn Glu Pro Cys Gly Gly Gln  
                         370                      375                      380  
Lys Gly Phe Val Pro Gln Lys Gly Arg Ser Asp Thr Leu Ile Lys Pro  
385                      390                      395                      400  
Val Leu Val Lys Pro Glu Gly Val Leu Val Glu Lys Thr His Ser Ser  
                         405                      410                      415  
Leu Leu Cys Pro Lys Gly Lys Val Ala Ser Glu Ser Val Ser Leu Glu  
                         420                      425                      430  
Leu Pro Val Asp Ile Val Pro Asp Ser Thr Lys Ala Tyr Val Thr Val  
                         435                      440                      445  
Leu Gly Asp Ile Met Gly Thr Ala Leu Gln Asn Leu Asp Gly Leu Val  
                         450                      455                      460  
Gln Met Pro Ser Gly Cys Gly Glu Gln Asn Met Val Leu Phe Ala Pro  
465                      470                      475                      480  
Ile Ile Tyr Val Leu Gln Tyr Leu Glu Lys Ala Gly Leu Leu Thr Glu  
                         485                      490                      495  
Glu Ile Arg Ser Arg Ala Val Gly Phe Leu Glu Ile Gly Tyr Gln Lys  
                         500                      505                      510  
Glu Leu Met Tyr Lys His Ser Asn Gly Ser Tyr Ser Ala Phe Gly Glu  
                         515                      520                      525  
Arg Asp Gly Asn Gly Asn Thr Trp Leu Thr Ala Phe Val Thr Lys Cys  
                         530                      535                      540

Phe Gly Gln Ala Gln Lys Phe Ile Phe Ile Asp Pro Lys Asn Ile Gln  
545 550 555 560  
Asp Ala Leu Lys Trp Met Ala Gly Asn Gln Leu Pro Ser Gly Cys Tyr  
565 570 575  
Ala Asn Val Gly Asn Leu Leu His Thr Ala Met Lys Gly Gly Val Asp  
580 585 590  
Asp Glu Val Ser Leu Thr Ala Tyr Val Thr Ala Ala Leu Leu Glu Met  
595 600 605  
Gly Lys Asp Val Asp Asp Pro Met Val Ser Gln Gly Leu Trp Cys Leu  
610 615 620  
Lys Asn Ser Ala Thr Ser Thr Thr Asn Leu Tyr Thr Gln Ala Leu Leu  
625 630 635 640  
Ala Tyr Ile Phe Ser Leu Ala Gly Glu Met Asp Ile Arg Asn Ile Leu  
645 650 655  
Leu Lys Gln Leu Asp Gln Gln Ala Ile Ile Ser Gly Glu Ser Ile Tyr  
660 665 670  
Trp Ser Gln Lys Pro Thr Pro Ser Ser Asn Ala Ser Pro Trp Ser Glu  
675 680 685  
Pro Ala Ala Val Asp Val Glu Leu Thr Ala Tyr Ala Leu Leu Ala Gln  
690 695 700  
Leu Thr Lys Pro Ser Leu Thr Gln Lys Glu Ile Ala Lys Ala Thr Ser  
705 710 715 720  
Ile Val Ala Trp Leu Ala Lys Gln Arg Asn Ala Tyr Gly Gly Phe Ser  
725 730 735  
Ser Thr Gln Asp Thr Val Val Ala Leu Gln Ala Pro Ala Lys Tyr Ala  
740 745 750  
Thr Thr Ala Tyr Val Pro Ser Glu Glu Ile Asn Leu Val Val Lys Ser  
755 760 765  
Thr Glu Asn Phe Gln Arg Thr Phe Asn Ile Gln Ser Val Asn Arg Leu

770 775 780  
Val Phe Gln Gln Asp Thr Leu Pro Asn Val Pro Gly Met Tyr Thr Leu  
785 790 795 800  
Glu Ala Ser Gly Gln Gly Cys Val Tyr Val Gln Thr Val Leu Arg Tyr  
805 810 815  
Asn Ile Leu Pro Pro Thr Asn Met Lys Thr Phe Ser Leu Ser Val Glu  
820 825 830  
Ile Gly Lys Ala Arg Cys Glu Gln Pro Thr Ser Pro Arg Ser Leu Thr  
835 840 845  
Leu Thr Ile His Thr Ser Tyr Val Gly Ser Arg Ser Ser Ser Asn Met  
850 855 860  
Ala Ile Val Glu Val Lys Met Leu Ser Gly Phe Ser Pro Met Glu Gly  
865 870 875 880  
Thr Asn Gln Leu Leu Leu Gln Gln Pro Leu Val Lys Lys Val Glu Phe  
885 890 895  
Gly Thr Asp Thr Leu Asn Ile Tyr Leu Asp Glu Leu Ile Lys Asn Thr  
900 905 910  
Gln Thr Tyr Thr Phe Thr Ile Ser Gln Ser Val Leu Val Thr Asn Leu  
915 920 925  
Lys Pro Ala Thr Ile Lys Val Tyr Asp Tyr Tyr Leu Pro Asp Glu Gln  
930 935 940  
Ala Thr Ile Gln Tyr Ser Asp Pro Cys Glu  
945 950

&lt;210&gt; 2896

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2896

Met Pro Glu Ser Leu Asn Glu Glu Arg Trp Trp Ile Ser Phe Ser Ala  
 1 5 10 15  
 Lys Lys Phe Ala Glu Ala Leu Gly Ser Thr Glu Ala Lys Ala Leu Leu  
 20 25 30  
 Tyr Gln Lys Phe Glu Gly His Ala Asn Asp Leu Tyr Val Glu Gly Leu  
 35 40 45  
 Pro Glu Asn Ile Pro Phe Arg Ser Pro Ser Trp Tyr Gly Ile Pro Arg  
 50 55 60  
 Leu Glu Asn Ile Ile Gln Val Gly Asn Gln Ile Lys Phe Leu Ile Lys  
 65 70 75 80  
 Ser Asn Ser Ser Arg Thr Pro Leu Ser Pro Ser Arg Leu Ser Ser Ser  
 85 90 95  
 Ser Thr Thr Pro Pro Gln Lys Pro  
 100

&lt;210&gt; 2897

&lt;211&gt; 754

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

Met Arg Ser Gln Asn Pro Glu Lys Ser Ala Arg Ile Pro Asp Ser Ile  
 1 5 10 15  
 Ala Val Ile Gln Gln Leu Ser Pro Lys Glu Gln Arg Ala Phe Glu Leu  
 20 25 30  
 Lys Leu Lys Glu Ile Lys Glu Gln His Lys Asn Phe Glu Asp Phe Tyr

35	40	45
Ser Phe Met Ile Met Lys Thr Asn Phe Asn Lys Glu Tyr Ile Glu Asn		
50	55	60
Val Val Arg Asn Ile Leu Lys Gly Gln Asn Ile Phe Thr Lys Glu Ala		
65	70	75
Lys Leu Phe Ser Phe Leu Ala Leu Leu Asn Ser Tyr Val Pro Asp Thr		
85	90	95
Thr Ile Ser Leu Ser Gln Cys Glu Lys Phe Leu Gly Ile Gly Asn Lys		
100	105	110
Lys Ala Phe Trp Gly Thr Glu Lys Phe Glu Asp Lys Met Gly Thr Tyr		
115	120	125
Ser Thr Ile Leu Ile Lys Thr Glu Val Ile Glu Cys Gly Asn Tyr Cys		
130	135	140
Gly Val Arg Ile Ile His Ser Leu Ile Ala Glu Phe Ser Leu Glu Glu		
145	150	155
Leu Lys Lys Ser Tyr His Leu Asn Lys Ser Gln Ile Met Leu Asp Met		
165	170	175
Leu Thr Glu Ser Leu Phe Phe Asp Thr Gly Met Gly Lys Ser Lys Phe		
180	185	190
Leu Gln Asp Met His Thr Leu Leu Leu Thr Arg His Arg Asp Glu His		
195	200	205
Glu Gly Glu Thr Gly Asn Trp Phe Ser Pro Phe Ile Glu Ala Leu His		
210	215	220
Lys Asp Glu Gly Asn Glu Ala Val Glu Ala Val Leu Leu Glu Ser Ile		
225	230	235
His Arg Phe Asn Pro Asn Ala Phe Ile Cys Gln Ala Leu Ala Arg His		
245	250	255
Phe Tyr Ile Lys Lys Lys Asp Phe Gly Asn Ala Leu Asn Trp Ala Lys		
260	265	270

Gln Ala Lys Ile Ile Glu Pro Asp Asn Ser Tyr Ile Ser Asp Thr Leu  
 275 280 285  
 Gly Gln Val Tyr Lys Ser Lys Ile Arg Trp Trp Ile Glu Glu Asn Gly  
 290 295 300  
 Gly Asn Gly Asn Ile Ser Val Asp Asp Leu Ile Ala Leu Leu Asp Leu  
 305 310 315 320  
 Ala Glu His Ala Ser Ser Ala Phe Lys Glu Ser Gln Gln Gln Ser Glu  
 325 330 335  
 Asp Arg Glu Tyr Glu Val Lys Glu Arg Leu Tyr Pro Lys Ser Lys Arg  
 340 345 350  
 Arg Tyr Asp Thr Tyr Asn Ile Ala Gly Tyr Gln Gly Glu Ile Glu Val  
 355 360 365  
 Gly Leu Tyr Thr Ile Gln Ile Leu Gln Leu Ile Pro Phe Phe Asp Asn  
 370 375 380  
 Lys Asn Glu Leu Ser Lys Arg Tyr Met Val Asn Phe Val Ser Gly Ser  
 385 390 395 400  
 Ser Asp Ile Pro Gly Asp Pro Asn Asn Glu Tyr Lys Leu Ala Leu Glu  
 405 410 415  
 Asn Tyr Ile Pro Tyr Leu Thr Lys Leu Lys Phe Ser Leu Lys Lys Ser  
 420 425 430  
 Phe Asp Phe Phe Asp Glu Tyr Phe Val Leu Leu Lys Pro Arg Asn Asn  
 435 440 445  
 Ile Lys Gln Asn Glu Glu Ala Lys Thr Arg Arg Lys Val Ala Gly Tyr  
 450 455 460  
 Phe Lys Lys Tyr Val Asp Ile Phe Cys Leu Leu Glu Glu Ser Gln Asn  
 465 470 475 480  
 Asn Thr Gly Leu Gly Ser Lys Phe Ser Glu Pro Leu Gln Val Glu Arg  
 485 490 495  
 Cys Arg Arg Asn Leu Val Ala Leu Lys Ala Asp Lys Phe Ser Gly Leu

500 505 510  
Leu Glu Tyr Leu Ile Lys Ser Gln Glu Asp Ala Ile Ser Thr Met Lys  
515 520 525  
Cys Ile Val Asn Glu Tyr Thr Phe Leu Leu Glu Gln Cys Thr Val Lys  
530 535 540  
Ile Gln Ser Lys Glu Lys Leu Asn Phe Ile Leu Ala Asn Ile Ile Leu  
545 550 555 560  
Ser Cys Ile Gln Pro Thr Ser Arg Leu Val Lys Pro Val Glu Lys Leu  
565 570 575  
Lys Asp Gln Leu Arg Glu Val Leu Gln Pro Ile Gly Leu Thr Tyr Gln  
580 585 590  
Phe Ser Glu Pro Tyr Phe Leu Ala Ser Leu Leu Phe Trp Pro Glu Asn  
595 600 605  
Gln Gln Leu Asp Gln His Ser Glu Gln Met Lys Glu Tyr Ala Gln Ala  
610 615 620  
Leu Lys Asn Ser Phe Lys Gly Gln Tyr Lys His Met His Arg Thr Lys  
625 630 635 640  
Gln Pro Ile Ala Tyr Phe Phe Leu Gly Lys Gly Lys Arg Leu Glu Arg  
645 650 655  
Leu Val His Lys Gly Lys Ile Asp Gln Cys Phe Lys Lys Thr Pro Asp  
660 665 670  
Ile Asn Ser Leu Trp Gln Ser Gly Asp Val Trp Lys Glu Glu Lys Val  
675 680 685  
Gln Glu Leu Leu Leu Arg Leu Gln Gly Arg Ala Glu Asn Asn Cys Leu  
690 695 700  
Tyr Ile Glu Tyr Gly Ile Asn Glu Lys Ile Thr Ile Pro Ile Thr Pro  
705 710 715 720  
Ala Phe Leu Gly Gln Leu Arg Ser Gly Arg Ser Ile Glu Lys Val Ser  
725 730 735

Phe Tyr Leu Gly Phe Ser Ile Gly Gly Pro Leu Ala Tyr Asp Ile Glu

740

745

750

Ile Val

<210> 2898

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2898

Met Val Phe Ala Phe Phe Phe Phe Leu Arg Gln Gly Leu Ala Leu Leu

1

5

10

15

Pro Arg Leu Glu Cys Asn Asp Thr Ile Ser Ala His Cys Asn Leu Tyr

20

25

30

Leu Leu Gly Ser Ser His Pro Pro Thr Ser Pro Ser Gln Val Ala Gly

35

40

45

Thr Thr Gly Thr His His His Thr Gln Arg Ser Phe Val Leu Tyr Ile

50

55

60

Glu Met Glu Phe Tyr His Val Ala Gln Thr Gly Leu Glu Leu Leu Ser

65

70

75

80

Ser Arg Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Arg Ile Thr Asp

85

90

95

Val Ser His Arg Ser Arg Pro His Asn Ser Val Phe

100

105

<210> 2899

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2899

Met Asp Thr Glu Asp Pro Leu Gln Gly Leu Pro Ile Thr Leu His Arg

1 5 10 15

Arg Ser Pro Phe Pro Glu Val Arg Leu Leu Ala Arg Gly Gly Val Val

20 25 30

Leu Cys Pro Ser Lys Leu Pro Ser Ser Pro Asn Val Arg Ser Ser Gly

35 40 45

Arg Pro Ser Cys Gly Arg Leu Arg Cys Gly Gly Lys Leu Ala Ala Cys

50 55 60

Pro Leu Ala Arg Ala Ser Arg Gly Leu Ala Leu Gly Gln Ser Arg Leu

65 70 75 80

Ala Gly Met Val Gln Gly Val Ser Leu Ala Ala Phe Cys Val Ile Trp

85 90 95

Gly Ala Ala Leu Gln Pro Arg Arg Gly Gly Arg

100 105

&lt;210&gt; 2900

&lt;211&gt; 640

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

Met Pro Lys Pro Pro Lys Pro Arg Asn Asn Leu Glu Asp Arg Tyr Asn

1 5 10 15

Pro Gly Ile Gln Gly Arg Arg Glu His Arg Pro Gly Pro Gly Arg Val  
 20 25 30  
 Arg Ala Ala Ser Ser Pro Gly Gly Ser Ala Pro Arg Ala Glu Arg Arg  
 35 40 45  
 Leu Trp Gly Glu Gly Trp Glu Ser Gly Ala Ala Pro His Pro His Ser  
 50 55 60  
 Ser Arg Val Ser Ala Leu Arg Pro Cys Gly Val Val Gly Ala Trp Val  
 65 70 75 80  
 Gly Met Gly Val Cys Gln Arg Thr Arg Ala Pro Trp Lys Glu Lys Ser  
 85 90 95  
 Gln Leu Glu Arg Ala Ala Leu Gly Phe Arg Lys Gly Gly Ser Gly Met  
 100 105 110  
 Phe Ala Ser Gly Trp Asn Gln Thr Val Pro Ile Glu Glu Ala Gly Ser  
 115 120 125  
 Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu  
 130 135 140  
 Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp  
 145 150 155 160  
 Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala  
 165 170 175  
 Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly  
 180 185 190  
 Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Ala  
 195 200 205  
 His Thr Phe Leu Ile His Gly Ser Arg Arg Phe Ser Tyr Ser Glu Ala  
 210 215 220  
 Glu Arg Glu Ser Asn Arg Ala Ala Arg Ala Phe Leu Arg Ala Leu Gly  
 225 230 235 240  
 Trp Asp Trp Gly Pro Asp Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly

245	250	255
Glu Gly Glu Arg Ala Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly Ser		
260	265	270
Gly Ala Glu Phe Ala Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly Ala		
275	280	285
Ala Ala Pro Leu Ser Pro Gly Ala Thr Val Ala Leu Leu Leu Pro Ala		
290	295	300
Gly Pro Glu Phe Leu Trp Leu Trp Phe Gly Leu Ala Lys Ala Gly Leu		
305	310	315
320		
Arg Thr Ala Phe Val Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His		
325	330	335
Cys Leu Arg Ser Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe		
340	345	350
Leu Glu Ser Leu Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu		
355	360	365
His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp		
370	375	380
Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr		
385	390	395
400		
Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr		
405	410	415
Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys		
420	425	430
Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu		
435	440	445
Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu		
450	455	460
Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys		
465	470	475
480		



Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg  
485 490 495  
Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn  
500 505 510  
Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val  
515 520 525  
Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe  
530 535 540  
Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val  
545 550 555 560  
Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser  
565 570 575  
Trp Leu Tyr Lys His Ile Phe Pro Phe Ser Leu Ile Arg Tyr Asp Val  
580 585 590  
Thr Thr Gly Glu Pro Ile Arg Asp Pro Gln Gly His Cys Met Ala Thr  
595 600 605  
Ser Pro Gly Glu Pro Gly Leu Leu Val Ala Pro Val Ala Ser Ser Pro  
610 615 620  
His Ser Trp Ala Met Leu Ala Gly Gln Ser Trp Pro Arg Gly Ser Cys  
625 630 635 640

&lt;210&gt; 2901

&lt;211&gt; 437

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

Met Thr Thr Glu Gly Phe Asp Val Arg Ser Val Gly Asn Thr Leu Val

1	5	10	15
Leu His Gln Thr Ala Leu Val Glu Ala Phe Asn Leu Lys Ala Ala Ile			
20	25	30	
Glu Tyr Gln Leu Arg Asn Tyr Glu Val Ala Gln Glu Thr Leu Thr Asp			
35	40	45	
Met Pro Pro Arg Ala Glu Glu Glu Leu Asp Pro Val Thr Leu His Asn			
50	55	60	
Gln Ala Leu Met Asn Met Asp Ala Arg Pro Thr Glu Gly Phe Glu Lys			
65	70	75	80
Leu Gln Phe Leu Leu Gln Gln Asn Pro Phe Pro Pro Glu Thr Phe Gly			
85	90	95	
Asn Leu Leu Leu Leu Tyr Cys Lys Tyr Glu Tyr Phe Asp Leu Ala Ala			
100	105	110	
Asp Val Leu Ala Glu Asn Ala His Leu Thr Tyr Lys Phe Leu Thr Pro			
115	120	125	
Tyr Leu Tyr Asp Phe Leu Asp Ala Leu Ile Thr Cys Gln Thr Ala Pro			
130	135	140	
Glu Glu Ala Phe Ile Lys Leu Asp Gly Leu Ala Gly Met Leu Thr Glu			
145	150	155	160
Gln Leu Arg Arg Leu Thr Lys Gln Val Gln Glu Ala Arg His Asn Arg			
165	170	175	
Asp Asp Glu Ala Ile Lys Lys Ala Val Asn Glu Tyr Asp Glu Thr Met			
180	185	190	
Glu Lys Tyr Ile Pro Val Leu Met Ala Gln Ala Lys Ile Tyr Trp Asn			
195	200	205	
Leu Glu Asn Tyr Pro Met Val Glu Lys Ile Phe Arg Lys Ser Val Glu			
210	215	220	
Phe Cys Asn Asp His Asp Val Trp Lys Leu Asn Val Ala His Val Leu			
225	230	235	240

<210> 2902

&lt;211&gt; 1036

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

Met Asp Asp Pro Ser Pro Cys Gly Thr Ser Glu Met Cys Pro Ala Ala

1 5 10 15

Leu Tyr Gly Phe Pro Ser Thr Gly Thr Ser Pro Pro Arg Pro Pro Ala

20 25 30

Asn Ser Thr Gly Thr Val Gln His Leu Arg Ser Asp Ser Phe Pro Gly

35 40 45

Ser His Arg Thr Glu Gln Thr Pro Asp Leu Val Gly Met Leu Leu Ser

50 55 60

Tyr Ser His Ser Glu Leu Pro Gln Arg Pro Pro Lys Pro Ala Ile Tyr

65 70 75 80

Ser Ser Val Thr Pro Arg Arg Asp Arg Arg Ser Gly Arg Asp Tyr Ser

85 90 95

Thr Val Ser Ala Ser Pro Thr Ala Leu Ser Thr Leu Lys Gln Asp Ser

100 105 110

Gln Glu Ser Ile Ser Asn Leu Glu Arg Pro Ser Ser Pro Pro Ser Ile

115 120 125

Gln Pro Trp Val Ser Pro His Asn Pro Ala Phe Ala Thr Glu Ser Pro

130 135 140

Ala Tyr Gly Ser Ser Pro Ser Phe Val Ser Met Glu Asp Val Arg Ile

145 150 155 160

His Glu Pro Leu Pro Pro Pro Pro Pro Gln Arg Arg Asp Thr His Pro

165 170 175

Ser Val Val Glu Thr Asp Gly His Ala Arg Val Val Val Pro Thr Leu

180 185 190

Lys Gln His Ser His Pro Pro Pro Leu Ala Leu Gly Ser Gly Leu His  
195 200 205

Ala Pro His Lys Gly Pro Leu Pro Gln Ala Ser Asp Pro Ala Val Ala  
210 215 220

Arg Gln His Arg Pro Leu Pro Ser Thr Pro Asp Ser Ser His His Ala  
225 230 235 240

Gln Ala Thr Pro Arg Trp Arg Tyr Asn Lys Pro Leu Pro Pro Thr Pro  
245 250 255

Asp Leu Pro Gln Pro His Leu Pro Pro Ile Ser Ala Pro Gly Ser Ser  
260 265 270

Arg Ile Tyr Arg Pro Leu Pro Pro Leu Pro Ile Ile Asp Pro Pro Thr  
275 280 285

Glu Pro Pro Pro Leu Pro Pro Lys Ser Arg Gly Arg Ser Arg Ser Thr  
290 295 300

Arg Gly Gly His Met Asn Ser Gly Gly His Ala Lys Thr Arg Pro Ala  
305 310 315 320

Cys Gln Asp Trp Thr Val Pro Leu Pro Ala Ser Ala Gly Arg Thr Ser  
325 330 335

Trp Pro Pro Ala Thr Ala Arg Ser Thr Glu Ser Phe Thr Ser Thr Ser  
340 345 350

Arg Ser Lys Ser Glu Val Ser Pro Gly Met Ala Phe Ser Asn Met Thr  
355 360 365

Asn Phe Leu Cys Pro Ser Ser Pro Thr Thr Pro Trp Thr Pro Glu Leu  
370 375 380

Gln Gly Pro Thr Ser Lys Asp Glu Ala Gly Val Ser Glu His Pro Glu  
385 390 395 400

Ala Pro Ala Arg Glu Pro Leu Arg Arg Thr Thr Pro Gln Gln Gly Ala  
405 410 415

Ser Gly Pro Gly Arg Ser Pro Val Gly Gln Ala Arg Gln Pro Glu Lys

420 425 430  
Pro Ser His Leu His Leu Glu Lys Ala Ser Ser Trp Pro His Arg Arg  
435 440 445  
Asp Ser Gly Arg Pro Pro Gly Asp Ser Ser Gly Gln Ala Val Ala Pro  
450 455 460  
Ser Glu Gly Ala Asn Lys His Lys Gly Trp Ser Arg Gln Gly Leu Arg  
465 470 475 480  
Arg Pro Ser Ile Leu Pro Glu Gly Ser Ser Asp Ser Arg Gly Pro Ala  
485 490 495  
Val Glu Lys His Pro Gly Pro Ser Asp Thr Val Val Phe Arg Glu Lys  
500 505 510  
Lys Pro Lys Glu Val Met Gly Gly Phe Ser Arg Arg Cys Ser Lys Leu  
515 520 525  
Ile Asn Ser Ser Gln Leu Leu Tyr Gln Glu Tyr Ser Asp Val Val Leu  
530 535 540  
Asn Lys Glu Ile Gln Ser Gln Gln Arg Leu Glu Ser Leu Ser Glu Thr  
545 550 555 560  
Pro Gly Pro Ser Ser Pro Arg Gln Pro Arg Lys Ala Leu Val Ser Ser  
565 570 575  
Glu Ser Tyr Leu Gln Arg Leu Ser Met Ala Ser Ser Gly Ser Leu Trp  
580 585 590  
Gln Glu Ile Pro Val Val Arg Asn Ser Thr Val Leu Leu Ser Met Thr  
595 600 605  
His Glu Asp Gln Lys Leu Gln Glu Val Lys Phe Glu Leu Ile Val Ser  
610 615 620  
Glu Ala Ser Tyr Leu Arg Ser Leu Asn Ile Ala Val Asp His Phe Gln  
625 630 635 640  
Leu Ser Thr Ser Leu Arg Ala Thr Leu Ser Asn Gln Glu His Gln Trp  
645 650 655

Leu Phe Ser Arg Leu Gln Asp Val Arg Asp Val Ser Ala Thr Phe Leu  
660 665 670

Ser Asp Leu Glu Glu Asn Phe Glu Asn Asn Ile Phe Ser Phe Gln Val  
675 680 685

Cys Asp Val Val Leu Asn His Ala Pro Asp Phe Arg Arg Val Tyr Leu  
690 695 700

Pro Tyr Val Thr Asn Gln Thr Tyr Gln Glu Arg Thr Phe Gln Ser Leu  
705 710 715 720

Met Asn Ser Asn Ser Asn Phe Arg Glu Val Leu Glu Lys Leu Glu Ser  
725 730 735

Asp Pro Val Cys Gln Arg Leu Ser Leu Lys Ser Phe Leu Ile Leu Pro  
740 745 750

Phe Gln Arg Ile Thr Arg Leu Lys Leu Leu Leu Gln Asn Ile Leu Lys  
755 760 765

Arg Thr Gln Pro Gly Ser Ser Glu Glu Ala Glu Ala Thr Lys Ala His  
770 775 780

His Ala Leu Glu Gln Leu Ile Arg Asp Cys Asn Asn Asn Val Gln Ser  
785 790 795 800

Met Arg Arg Thr Glu Glu Leu Ile Tyr Leu Ser Gln Lys Ile Glu Phe  
805 810 815

Glu Cys Lys Ile Phe Pro Leu Ile Ser Gln Ser Arg Trp Leu Val Lys  
820 825 830

Ser Gly Glu Leu Thr Ala Leu Glu Phe Ser Ala Ser Pro Gly Leu Arg  
835 840 845

Arg Lys Leu Asn Thr Arg Pro Val His Leu His Leu Phe Asn Asp Cys  
850 855 860

Leu Leu Leu Ser Arg Pro Arg Glu Gly Ser Arg Phe Leu Val Phe Asp  
865 870 875 880

His Ala Pro Phe Ser Ser Ile Arg Gly Glu Lys Cys Glu Met Lys Leu

	885		890		895
His Gly Pro His Lys Asn Leu Phe Arg Leu Phe Leu Arg Gln Asn Thr					
	900		905		910
Gln Gly Ala Gln Ala Glu Phe Leu Phe Arg Thr Glu Thr Gln Ser Glu					
	915		920		925
Lys Leu Arg Trp Ile Ser Ala Leu Ala Met Pro Arg Glu Glu Leu Asp					
	930		935		940
Leu Leu Glu Cys Tyr Asn Ser Pro Gln Val Gln Cys Leu Arg Ala Tyr					
945		950		955	960
Lys Pro Arg Glu Asn Asp Glu Leu Ala Leu Glu Lys Ala Asp Val Val					
	965		970		975
Met Val Thr Gln Gln Ser Ser Asp Gly Trp Leu Glu Gly Val Arg Leu					
	980		985		990
Ser Asp Gly Glu Arg Gly Trp Phe Pro Val Gln Gln Val Glu Phe Ile					
	995		1000		1005
Ser Asn Pro Glu Val Arg Ala Gln Asn Leu Lys Glu Ala His Arg Val					
	1010		1015		1020
Lys Thr Ala Lys Leu Gln Leu Val Glu Gln Gln Ala					
1025		1030		1035	

&lt;210&gt; 2903

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2903

Met Ala Gln Leu Pro His His His Val Pro Glu Pro Ala Phe Arg Lys

1

5

10

15



Leu Val Glu Asp Ala Leu Gly Arg Thr Ser Asn Gln Leu Arg Ser Phe  
20 25 30  
Gln Glu Thr Phe Glu Lys Val Gln Pro Pro Pro Thr Thr Gln Leu Leu  
35 40 45  
Leu Pro Gly Ser Glu Arg Gln Val Gln Ala Leu Leu Ser Arg Tyr Gly  
50 55 60  
Pro Gly Lys Leu Tyr Gln Val Thr Ser Asn Ile Ser Gly Thr Gly Thr  
65 70 75 80  
Leu Asp Leu Thr Leu Pro Arg Gly Gln Ile Val Ala Ile Leu Gln Asn  
85 90 95  
Lys Asp Thr Lys Gly Asn Ser Gly Arg Trp Leu Val Asp Thr Gly Gly  
100 105 110  
His Arg Gly Tyr Val Pro Ala Gly Lys Leu Gln Leu Tyr His Val Val  
115 120 125  
Pro Ser Ala Glu Glu Leu Arg Arg Gln Ala Gly Leu Asn Lys Asp Pro  
130 135 140  
Arg Cys Leu Thr Pro Glu Pro Ser Pro Ala Leu Val Pro Ser Ile Pro  
145 150 155 160  
Thr Val Asn Gln Val Ile Ala Ala Tyr Pro Phe Val Ala Arg Ser Ser  
165 170 175  
His Glu Val Ser Leu Gln Ala Gly Gln Pro Val Thr Ile Leu Glu Ala  
180 185 190  
Gln Asp Lys Lys Gly Asn Pro Glu Trp Ser Leu Val Glu Val Asn Gly  
195 200 205  
Gln Arg Gly Tyr Val Pro Ser Gly Phe Leu Ala Arg Ala Arg Ser Pro  
210 215 220  
Val Leu Trp Gly Trp Ser Leu Pro Ser  
225 230

&lt;210&gt; 2904

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2904

Met Phe Ser His Ile Leu Ala Asn Leu Glu Gln Gly Leu Ala Glu Asp

1 5 10 15

Gly Gly Met Ser Ser Val Thr Gln Glu Gly Arg Gln Ala Ser Ile Arg

20 25 30

Leu Trp Arg Ser Arg Leu Gly Arg Val Met Tyr Ser Met Ala Asn Cys

35 40 45

Leu Leu Leu Met Lys Asp Tyr Val Leu Ala Val Glu Ala Tyr His Ser

50 55 60

Val Ile Lys Tyr Tyr Pro Glu Gln Glu Pro Gln Leu Leu Ser Gly Ile

65 70 75 80

Gly Arg Ile Ser Leu Gln Ile Gly Asp Ile Lys Thr Ala Glu Lys Tyr

85 90 95

Phe Gln Asp Val Glu Lys Val Thr Gln Lys Leu Asp Gly Leu Gln Gly

100 105 110

Lys Ile Met Val Leu Met Asn Ser Ala Phe Leu His Leu Gly Gln Asn

115 120 125

Asn Phe Ala Glu Ala His Arg Phe Phe Thr Glu Ile Leu Arg Met Asp

130 135 140

Pro Arg Asn Ala Val Ala Asn Asn Asn Ala Ala Val Cys Leu Leu Tyr

145 150 155 160

Leu Gly Lys Leu Lys Asp Ser Leu Arg Gln Leu Glu Ala Met Val Gln

165 170 175

Gln Asp Pro Arg His Tyr Leu His Glu Ser Val Leu Phe Asn Leu Thr  
 180 185 190  
 Thr Met Tyr Glu Leu Glu Ser Ser Arg Ser Met Gln Lys Lys Gln Ala  
 195 200 205  
 Leu Leu Glu Ala Val Ala Gly Lys Glu Gly Asp Ser Phe Asn Thr Gln  
 210 215 220  
 Cys Leu Lys Leu Ala  
 225

<210> 2905

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2905

Met Leu Leu Arg Lys Ala Ser Thr Cys Leu Lys Gly Gly Thr Ala Phe  
 1 5 10 15  
 Asn Ser Gly His Ser Cys Cys Pro Leu Thr Ser Val Cys Gly Leu Ala  
 20 25 30  
 Ala Ala Pro Gly Thr Gln Gln Glu Pro Pro Glu Gly Cys Gly Leu Cys  
 35 40 45  
 Gly Gln Arg Asp Ser Leu Gln Leu Pro Pro Cys Pro Pro Ala Leu Arg  
 50 55 60  
 Gly Asn Asn Ser Arg Ala Thr Ala Gly Pro Arg Leu Gln Ser His Leu  
 65 70 75 80  
 Cys Cys His Asp His Ser Gln Glu Ala Leu Gly Thr Trp Val Trp Lys  
 85 90 95  
 Ala Ser Arg Gln Gln Ser Cys Pro Val Ser Leu Gly Met Pro Glu Cys

100 105 110  
 Arg Asn Ala Asn Val  
 115

<210> 2906

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2906

Met Cys Met Leu Arg Leu Leu Pro Glu His Gln Asn Gly Asn Ile Arg  
 1 5 10 15  
 Val Phe Ile Leu Glu Ser Asn Leu Thr Ile Ile Met Asp Val Val Arg  
 20 25 30  
 Leu Phe Lys Lys Ser Met Phe Lys Asp Ile Glu Ser Thr Lys Met Ala  
 35 40 45  
 Ile Ser Asp Arg Leu Asp Lys Glu Asn Val Val His Ile His His Gly  
 50 55 60  
 Ile Leu Cys Ser Arg Arg Lys Glu Arg Asp His Val Arg Cys Arg Asp  
 65 70 75 80  
 Met Asp Gly Ala Gly Ser His Tyr Pro Gln Lys Thr Asn Pro Gly Thr  
 85 90 95  
 Glu Lys Gln Thr Pro His Val Leu Thr His Lys Trp Glu Leu Asn Thr  
 100 105 110  
 Glu Asn Thr Trp Asn Gln Gly Glu Glu Gln His Thr Leu Arg Pro Ala  
 115 120 125  
 Thr Ala Gly Gly Gly Ser Gly Glu Gly Glu His Gln Glu Asn Ser  
 130 135 140

&lt;210&gt; 2907

&lt;211&gt; 1035

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

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Met Val Phe Leu Gln Asn His Val Arg Phe Phe Leu Glu Ser Leu Pro
  1             5             10             15
Ala Phe Leu Arg Val Leu Ile Gln Ala Gly Ala Leu Cys Trp Ser Leu
      20             25             30
Pro Glu Leu Ser Gln Gly Glu Val Gly Lys Gly Ala Cys Pro Ala Glu
      35             40             45
Val Gly Lys His Arg Asp His Leu Pro Ser Ser Asp Pro Val Leu Met
      50             55             60
Gln Ala Glu Ala Ser Val Val Met Cys Trp Val Ser Ser Glu Asp Arg
      65             70             75             80
Ser Ala Leu Trp Ala Leu Val Thr Phe Tyr Gly Gly Asp Cys Gln Leu
      85             90             95
Thr Leu Asn Lys Lys Cys Thr His Leu Ile Val Pro Glu Pro Lys Gly
      100            105            110
Glu Lys Tyr Glu Cys Ala Leu Lys Arg Ala Ser Ile Lys Ile Val Thr
      115            120            125
Pro Asp Trp Val Leu Asp Cys Val Ser Glu Lys Thr Lys Lys Asp Glu
      130            135            140
Ala Phe Tyr His Pro Arg Leu Ile Ile Tyr Glu Glu Glu Glu Glu Glu
      145            150            155            160
Glu Glu Glu Glu Glu Glu Val Glu Asn Glu Glu Gln Asp Ser Gln Asn

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	165	170	175
Glu Gly Ser Thr Asp Glu Lys Ser Ser Pro Ala Ser Ser Gln Glu Gly			
	180	185	190
Ser Pro Ser Gly Asp Gln Gln Phe Ser Pro Lys Ser Asn Thr Glu Lys			
	195	200	205
Ser Lys Gly Glu Leu Met Phe Asp Asp Ser Ser Asp Ser Ser Pro Glu			
	210	215	220
Lys Gln Glu Arg Asn Leu Asn Trp Thr Pro Ala Glu Val Pro Gln Leu			
225	230	235	240
Ala Ala Ala Lys Arg Arg Leu Pro Gln Gly Lys Glu Pro Gly Leu Ile			
	245	250	255
Asn Leu Cys Ala Asn Val Pro Pro Val Pro Gly Asn Ile Leu Pro Pro			
	260	265	270
Glu Val Arg Gly Asn Leu Met Ala Ala Gly Gln Asn Leu Gln Ser Ser			
	275	280	285
Glu Arg Ser Glu Met Ile Ala Thr Trp Ser Pro Ala Val Arg Thr Leu			
	290	295	300
Arg Asn Ile Thr Asn Asn Ala Asp Ile Gln Gln Met Asn Arg Pro Ser			
305	310	315	320
Asn Val Ala His Ile Leu Gln Thr Leu Ser Ala Pro Thr Lys Asn Leu			
	325	330	335
Glu Gln Gln Val Asn His Ser Gln Gln Gly His Thr Asn Ala Asn Ala			
	340	345	350
Val Leu Phe Ser Gln Val Lys Val Thr Pro Glu Thr His Met Leu Gln			
	355	360	365
Gln Gln Gln Gln Ala Gln Gln Gln Gln Gln Gln His Pro Val Leu His			
	370	375	380
Leu Gln Pro Gln Gln Ile Met Gln Leu Gln Gln Gln Gln Gln Gln			
385	390	395	400

Ile Ser Gln Gln Pro Tyr Pro Gln Gln Pro Pro His Pro Phe Ser Gln  
405 410 415  
Gln Gln Gln Gln Gln Gln Gln Ala His Pro His Gln Phe Ser Gln Gln  
420 425 430  
Gln Leu Gln Phe Pro Gln Gln Gln Leu His Pro Pro Gln Gln Leu His  
435 440 445  
Arg Pro Gln Gln Gln Leu Gln Pro Phe Gln Gln Gln His Ala Leu Gln  
450 455 460  
Gln Gln Phe His Gln Leu Gln Gln His Gln Leu Gln Gln Gln Gln Leu  
465 470 475 480  
Ala Gln Leu Gln Gln Gln His Ser Leu Leu Gln Gln Gln Gln Gln Gln  
485 490 495  
Gln Ile Gln Gln Gln Gln Leu Gln Arg Met His Gln Gln Gln Gln Gln  
500 505 510  
Gln Gln Met Gln Ser Gln Thr Ala Pro His Leu Ser Gln Thr Ser Gln  
515 520 525  
Ala Leu Gln His Gln Val Pro Pro Gln Gln Pro Pro Gln Gln Gln Gln  
530 535 540  
Gln Gln Gln Pro Pro Pro Ser Pro Gln Gln His Gln Leu Phe Gly His  
545 550 555 560  
Asp Pro Ala Val Glu Ile Pro Glu Glu Gly Phe Leu Leu Gly Cys Val  
565 570 575  
Phe Ala Ile Ala Asp Tyr Pro Glu Gln Met Ser Asp Lys Gln Leu Leu  
580 585 590  
Ala Thr Trp Lys Arg Ile Ile Gln Ala His Gly Gly Thr Val Asp Pro  
595 600 605  
Thr Phe Thr Ser Arg Cys Thr His Leu Leu Cys Glu Ser Gln Val Ser  
610 615 620  
Ser Ala Tyr Ala Gln Ala Ile Arg Glu Arg Lys Arg Cys Val Thr Ala

625                      630                      635                      640  
His Trp Leu Asn Thr Val Leu Lys Lys Lys Lys Met Val Pro Pro His  
645                      650                      655  
Arg Ala Leu His Phe Pro Val Ala Phe Pro Pro Gly Gly Lys Pro Cys  
660                      665                      670  
Ser Gln His Ile Ile Ser Val Thr Gly Phe Val Asp Ser Asp Arg Asp  
675                      680                      685  
Asp Leu Lys Leu Met Ala Tyr Leu Ala Gly Ala Lys Tyr Thr Gly Tyr  
690                      695                      700  
Leu Cys Arg Ser Asn Thr Val Leu Ile Cys Lys Glu Pro Thr Gly Leu  
705                      710                      715                      720  
Lys Tyr Glu Lys Ala Lys Glu Trp Arg Ile Pro Cys Val Asn Ala Gln  
725                      730                      735  
Trp Leu Gly Asp Ile Leu Leu Gly Asn Phe Glu Ala Leu Arg Gln Ile  
740                      745                      750  
Gln Tyr Ser Arg Tyr Thr Ala Phe Ser Leu Gln Asp Pro Phe Ala Pro  
755                      760                      765  
Thr Gln His Leu Val Leu Asn Leu Leu Asp Ala Trp Arg Val Pro Leu  
770                      775                      780  
Lys Val Ser Ala Glu Leu Leu Met Ser Ile Arg Leu Pro Pro Lys Leu  
785                      790                      795                      800  
Lys Gln Asn Glu Val Ala Asn Val Gln Pro Ser Ser Lys Arg Ala Arg  
805                      810                      815  
Ile Glu Asp Val Pro Pro Pro Thr Lys Lys Leu Thr Pro Glu Leu Thr  
820                      825                      830  
Pro Phe Val Leu Phe Thr Gly Phe Glu Pro Val Gln Val Gln Gln Tyr  
835                      840                      845  
Ile Lys Lys Leu Tyr Ile Leu Gly Gly Glu Val Ala Glu Ser Ala Gln  
850                      855                      860



Lys Cys Thr His Leu Ile Ala Ser Lys Val Thr Arg Thr Val Lys Phe  
865 870 875 880  
Leu Thr Ala Ile Ser Val Val Lys His Ile Val Thr Pro Glu Trp Leu  
885 890 895  
Glu Glu Cys Phe Arg Cys Gln Lys Phe Ile Asp Glu Gln Asn Tyr Ile  
900 905 910  
Leu Arg Asp Ala Glu Ala Glu Val Leu Phe Ser Phe Ser Leu Glu Glu  
915 920 925  
Ser Leu Lys Arg Ala His Val Ser Pro Leu Phe Lys Ala Lys Tyr Phe  
930 935 940  
Tyr Ile Thr Pro Gly Ile Cys Pro Ser Leu Ser Thr Met Lys Ala Ile  
945 950 955 960  
Val Glu Cys Ala Gly Gly Lys Val Leu Ser Lys Gln Pro Ser Phe Arg  
965 970 975  
Lys Leu Met Glu His Lys Gln Asn Ser Ser Leu Ser Glu Ile Ile Leu  
980 985 990  
Ile Ser Cys Glu Asn Asp Leu His Leu Cys Arg Glu Tyr Phe Ala Arg  
995 1000 1005  
Gly Ile Asp Val His Asn Ala Glu Phe Val Leu Thr Gly Val Leu Thr  
1010 1015 1020  
Gln Thr Leu Asp Tyr Glu Ser Tyr Lys Phe Asn  
1025 1030 1035

&lt;210&gt; 2908

&lt;211&gt; 1298

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

Met	Val	Glu	Leu	Gln	Asp	Pro	Asn	Ser	Asn	Arg	Ile	Ala	Gln	Trp	Leu
1				5					10					15	
Glu	Val	Val	Pro	Glu	Gln	Gly	Ile	Val	Asp	Leu	Ser	Phe	Gln	Leu	Ala
			20					25					30		
Pro	Glu	Ala	Met	Leu	Gly	Thr	Tyr	Thr	Val	Ala	Val	Ala	Glu	Gly	Lys
		35					40					45			
Thr	Phe	Gly	Thr	Phe	Ser	Val	Glu	Glu	Tyr	Val	Leu	Pro	Lys	Phe	Lys
	50					55					60				
Val	Glu	Val	Val	Glu	Pro	Lys	Glu	Leu	Ser	Thr	Val	Gln	Glu	Ser	Phe
65					70					75				80	
Leu	Val	Lys	Ile	Cys	Cys	Arg	Tyr	Thr	Tyr	Gly	Lys	Pro	Met	Leu	Gly
			85						90				95		
Ala	Val	Gln	Val	Ser	Val	Cys	Gln	Lys	Ala	Asn	Thr	Tyr	Trp	Tyr	Arg
		100						105					110		
Glu	Val	Glu	Arg	Glu	Gln	Leu	Pro	Asp	Lys	Cys	Arg	Asn	Leu	Ser	Gly
	115					120						125			
Gln	Thr	Asp	Lys	Thr	Gly	Cys	Phe	Ser	Ala	Pro	Val	Asp	Met	Ala	Thr
	130					135						140			
Phe	Asp	Leu	Ile	Gly	Tyr	Ala	Tyr	Ser	His	Gln	Ile	Asn	Ile	Val	Ala
145					150					155				160	
Thr	Val	Val	Glu	Glu	Gly	Thr	Gly	Val	Glu	Ala	Asn	Ala	Thr	Gln	Asn
			165					170					175		
Ile	Tyr	Ile	Ser	Pro	Gln	Met	Gly	Ser	Met	Thr	Phe	Gly	Asp	Thr	Ser
		180						185					190		
Asn	Phe	Tyr	His	Pro	Asn	Phe	Pro	Phe	Ser	Gly	Lys	Ile	Arg	Val	Arg
		195					200					205			
Gly	His	Asp	Asp	Ser	Phe	Leu	Lys	Asn	His	Leu	Val	Phe	Leu	Val	Ile
	210						215					220			

Tyr Gly Thr Asn Gly Thr Phe Asn Gln Thr Leu Val Thr Asp Asn Asn  
225 230 235 240  
Gly Leu Ala Pro Phe Thr Leu Glu Thr Ser Gly Trp Asn Gly Thr Asp  
245 250 255  
Val Ser Leu Glu Gly Lys Phe Gln Met Glu Asp Leu Val Tyr Asn Pro  
260 265 270  
Glu Gln Val Pro Arg Tyr Tyr Gln Asn Ala Tyr Leu His Leu Arg Pro  
275 280 285  
Phe Tyr Ser Thr Thr Arg Ser Phe Leu Gly Ile His Arg Leu Asn Gly  
290 295 300  
Pro Leu Lys Cys Gly Gln Pro Gln Glu Val Leu Val Asp Tyr Tyr Ile  
305 310 315 320  
Asp Pro Ala Asp Ala Ser Pro Asp Gln Glu Ile Ser Phe Ser Tyr Tyr  
325 330 335  
Leu Ile Gly Lys Gly Ser Leu Val Met Glu Gly Gln Lys His Leu Asn  
340 345 350  
Ser Lys Lys Lys Gly Leu Lys Ala Ser Phe Ser Leu Ser Leu Thr Phe  
355 360 365  
Thr Ser Arg Leu Ala Pro Asp Pro Ser Leu Val Ile Tyr Ala Ile Phe  
370 375 380  
Pro Ser Gly Gly Val Val Ala Asp Lys Ile Gln Phe Ser Val Glu Met  
385 390 395 400  
Cys Phe Asp Asn Gln Val Ser Leu Gly Phe Ser Pro Ser Gln Gln Leu  
405 410 415  
Pro Gly Ala Glu Val Glu Leu Gln Leu Gln Ala Ala Pro Gly Ser Leu  
420 425 430  
Cys Ala Leu Arg Ala Val Asp Glu Ser Val Leu Leu Leu Arg Pro Asp  
435 440 445  
Arg Glu Leu Ser Asn Arg Ser Val Tyr Gly Met Phe Pro Phe Trp Tyr

450                      455                      460  
Gly His Tyr Pro Tyr Gln Val Ala Glu Tyr Asp Gln Cys Pro Val Ser  
465                      470                      475                      480  
Gly Pro Trp Asp Phe Pro Gln Pro Leu Ile Asp Pro Met Pro Gln Gly  
                         485                      490                      495  
His Ser Ser Gln Arg Ser Ile Ile Trp Arg Pro Ser Phe Ser Glu Gly  
                         500                      505                      510  
Thr Asp Leu Phe Ser Phe Phe Arg Asp Val Gly Leu Lys Ile Leu Ser  
                         515                      520                      525  
Asn Ala Lys Ile Lys Lys Pro Val Asp Cys Ser His Arg Ser Pro Glu  
                         530                      535                      540  
Tyr Ser Thr Ala Met Gly Ala Gly Gly Gly His Pro Glu Ala Phe Glu  
545                      550                      555                      560  
Ser Ser Thr Pro Leu His Gln Ala Glu Asp Ser Gln Val Arg Gln Tyr  
                         565                      570                      575  
Leu Pro Glu Thr Trp Leu Trp Asp Leu Phe Pro Ile Gly Asn Ser Gly  
                         580                      585                      590  
Lys Glu Ala Val His Val Thr Val Pro Asp Ala Ile Thr Glu Trp Lys  
                         595                      600                      605  
Ala Met Ser Phe Cys Thr Ser Gln Ser Arg Gly Phe Gly Leu Ser Pro  
                         610                      615                      620  
Thr Val Gly Leu Thr Ala Phe Lys Pro Phe Phe Val Asp Leu Thr Leu  
625                      630                      635                      640  
Pro Tyr Ser Val Val Arg Gly Glu Ser Phe Arg Leu Thr Ala Thr Ile  
                         645                      650                      655  
Phe Asn Tyr Leu Lys Asp Cys Ile Arg Val Gln Thr Asp Leu Ala Lys  
                         660                      665                      670  
Ser His Glu Tyr Gln Leu Glu Ser Trp Ala Asp Ser Gln Thr Ser Ser  
                         675                      680                      685

Cys Leu Cys Ala Asp Glu Ala Lys Thr His His Trp Asn Ile Thr Ala  
690 695 700  
Val Lys Leu Gly His Ile Asn Phe Thr Ile Ser Thr Lys Ile Leu Asp  
705 710 715 720  
Ser Asn Glu Pro Cys Gly Gly Gln Lys Gly Phe Val Pro Gln Lys Gly  
725 730 735  
Arg Ser Asp Thr Leu Ile Lys Pro Val Leu Val Lys Pro Glu Gly Val  
740 745 750  
Leu Val Glu Lys Thr His Ser Ser Leu Leu Cys Pro Lys Gly Lys Val  
755 760 765  
Ala Ser Glu Ser Val Ser Leu Glu Leu Pro Val Asp Ile Val Pro Asp  
770 775 780  
Ser Thr Lys Ala Tyr Val Thr Val Leu Gly Asp Ile Met Gly Thr Ala  
785 790 795 800  
Leu Gln Asn Leu Asp Gly Leu Val Gln Met Pro Ser Gly Cys Gly Glu  
805 810 815  
Gln Asn Met Val Leu Phe Ala Pro Ile Ile Tyr Val Leu Gln Tyr Leu  
820 825 830  
Glu Lys Ala Gly Leu Leu Thr Glu Glu Ile Arg Ser Arg Ala Val Gly  
835 840 845  
Phe Leu Glu Ile Gly Tyr Gln Lys Glu Leu Met Tyr Lys His Ser Asn  
850 855 860  
Gly Ser Tyr Ser Ala Phe Gly Glu Arg Asp Gly Asn Gly Asn Thr Trp  
865 870 875 880  
Leu Thr Ala Phe Val Thr Lys Cys Phe Gly Gln Ala Gln Lys Phe Ile  
885 890 895  
Phe Ile Asp Pro Lys Asn Ile Gln Asp Ala Leu Lys Trp Met Ala Gly  
900 905 910  
Asn Gln Leu Pro Ser Gly Cys Tyr Ala Asn Val Gly Asn Leu Leu His

915	920	925	
Thr Ala Met Lys Gly Gly Val Asp Asp Glu Val Ser Leu Thr Ala Tyr			
930	935	940	
Val Thr Ala Ala Leu Leu Glu Met Gly Lys Asp Val Asp Asp Pro Met			
945	950	955	960
Val Ser Gln Gly Leu Trp Cys Leu Lys Asn Ser Ala Thr Ser Thr Thr			
965	970	975	
Asn Leu Tyr Thr Gln Ala Leu Leu Ala Tyr Ile Phe Ser Leu Ala Gly			
980	985	990	
Glu Met Asp Ile Arg Asn Ile Leu Leu Lys Gln Leu Asp Gln Gln Ala			
995	1000	1005	
Ile Ile Ser Gly Glu Ser Ile Tyr Trp Ser Gln Lys Pro Thr Pro Ser			
1010	1015	1020	
Ser Asn Ala Ser Pro Trp Ser Glu Pro Ala Ala Val Asp Val Glu Leu			
1025	1030	1035	1040
Thr Ala Tyr Ala Leu Leu Ala Gln Leu Thr Lys Pro Ser Leu Thr Gln			
1045	1050	1055	
Lys Glu Ile Ala Lys Ala Thr Ser Ile Val Ala Trp Leu Ala Lys Gln			
1060	1065	1070	
Arg Asn Ala Tyr Gly Gly Phe Ser Ser Thr Gln Asp Thr Val Val Ala			
1075	1080	1085	
Leu Gln Ala Leu Ala Lys Tyr Ala Thr Thr Ala Tyr Val Pro Ser Glu			
1090	1095	1100	
Glu Ile Asn Leu Val Val Lys Ser Thr Glu Asn Phe Gln Arg Thr Phe			
1105	1110	1115	1120
Asn Ile Gln Ser Val Asn Arg Leu Val Phe Gln Gln Asp Thr Leu Pro			
1125	1130	1135	
Asn Val Pro Gly Met Tyr Thr Leu Glu Ala Ser Gly Gln Gly Cys Val			
1140	1145	1150	

Tyr Val Gln Thr Val Leu Arg Tyr Asn Ile Leu Pro Pro Thr Asn Met  
1155 1160 1165  
Lys Thr Phe Ser Leu Ser Val Glu Ile Gly Lys Ala Arg Cys Glu Gln  
1170 1175 1180  
Pro Thr Ser Pro Arg Ser Leu Thr Leu Thr Ile His Thr Ser Tyr Val  
1185 1190 1195 1200  
Gly Ser Arg Ser Ser Ser Asn Met Ala Ile Val Glu Val Lys Met Leu  
1205 1210 1215  
Ser Gly Phe Ser Pro Met Glu Gly Thr Asn Gln Leu Leu Leu Gln Gln  
1220 1225 1230  
Pro Leu Val Lys Lys Val Glu Phe Gly Thr Asp Thr Leu Asn Ile Tyr  
1235 1240 1245  
Leu Asp Glu Leu Ile Lys Asn Thr Gln Thr Tyr Thr Phe Thr Ile Ser  
1250 1255 1260  
Gln Ser Val Leu Val Thr Asn Leu Lys Pro Ala Thr Ile Lys Val Tyr  
1265 1270 1275 1280  
Asp Tyr Tyr Leu Pro Asp Glu Gln Ala Thr Ile Gln Tyr Ser Asp Pro  
1285 1290 1295  
Cys Glu

&lt;210&gt; 2909

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2909

Met Trp Glu Leu Trp Glu Tyr Asn Thr Arg Phe Gly Trp Gly His Ser

1                    5                    10                    15  
 Arg Thr Ile Ser Gln Val Glu Asn Pro Ala Lys Val Leu Asn Val Glu  
                   20                    25                    30  
 Pro Ala Lys Val Gln Pro Arg Phe Gly Val Val Pro Pro Ala Lys Ala  
                   35                    40                    45  
 His Pro Ser Ser Asp Pro Arg Ala Glu Asp Ser Trp Pro Lys Cys Glu  
                   50                    55                    60  
 Gly Ser Gly Arg Pro Met Phe Arg Phe Trp Trp Gln Val Leu Ala Gly  
                   65                    70                    75                    80  
 Arg Asp Val Cys Pro Pro Ile Cys Asp Ser Phe Ile Glu Pro Gly Ser  
                   85                    90                    95  
 Arg Lys Pro Phe Glu Asp Val Val  
                   100

<210> 2910

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2910

Met Phe Ser Tyr Cys Val Tyr Leu Arg Leu Phe Cys Val Cys Val His  
 1                    5                    10                    15  
 Val Cys Ser Tyr His Val Cys Met Arg Met Cys Val Thr Val Cys Val  
                   20                    25                    30  
 Arg Ala Leu Val Arg Ala His Val Cys Leu Val Thr Val Cys Leu Arg  
                   35                    40                    45  
 Leu Phe Cys Val Cys Ala His Met Cys Leu Val Pro Cys Val Cys Val  
                   50                    55                    60



Cys Ala Trp Ala Cys Val Phe Ser Cys Cys Val Arg Val Leu Val Leu  
 65 70 75 80  
 Cys Val Cys Thr His Val Cys Leu Val Thr Val Cys Ala Cys Ala Cys  
 85 90 95  
 Phe Val Cys Val His Ala Cys Leu Val Thr Ala Cys Ala Cys Ala Cys  
 100 105 110  
 Phe Val Cys Val Cys Met Cys Val Val Thr Met Cys Ala Cys Ala Cys  
 115 120 125  
 Val Leu Pro Cys Val Cys Val His Leu Cys Val Arg Met Cys Val  
 130 135 140

<210> 2911

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2911

Met Ala Phe Ser Lys Asp Pro Trp Leu Trp Leu Leu Ser Leu Leu Leu  
 1 5 10 15  
 Pro Ile Pro Asp Ser Arg Leu Arg His Pro Ser Pro Gly Gln Phe Glu  
 20 25 30  
 Cys Ser Glu Asn Glu His Arg Gly Ala Trp Phe Leu Ala Ser Pro Ala  
 35 40 45  
 Phe His Gln Pro Leu Trp His Pro Leu Tyr Cys Asp Ser His Lys Ala  
 50 55 60  
 Gln Arg Phe Leu Phe Thr Phe Lys Cys Arg Lys Val Leu Cys Cys Leu  
 65 70 75 80  
 Val Tyr Arg Glu Ala Ser Phe Ala His Pro Val Phe Thr Pro Cys Leu

	85		90		95
Ser Tyr Pro Arg Gly Ser Ala Gly Gly Pro Gly Lys Gly Gln Pro Leu					
	100		105		110
Thr Cys Leu Ala Thr Ile Val Ile Leu Leu Ser Ala Val Ala Ala Pro					
	115		120		125
Leu Ala Lys Thr Ser Gly Leu Arg Ala Leu Cys Gly Gln Asp Phe					
	130		135		140

&lt;210&gt; 2912

&lt;211&gt; 446

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2912

Met Asp Leu Ala Ala Ile Glu Gly Thr Ser Gln Glu Leu Thr Lys Ser			
1	5	10	15
His Arg Arg Asn Thr Ser Gly Thr Pro Ser Ile Ala Val Ser Gly Thr			
	20	25	30
Ser Leu Ser Ser Asp Gln Ser Arg Ser Glu Leu Asp Leu Ser Glu Ser			
	35	40	45
Phe Thr Glu Asp Ser Glu Asp Thr Val Ser Ile Arg Ser Lys Ser Val			
	50	55	60
Pro Gly Ala Leu Asp Lys Asp Ser Leu Glu Glu Thr Glu Glu Ser Ile			
	65	70	75
Asp Ala Leu Val Ser Ser Gln Leu Ser Thr Asn Thr His Arg Leu Ala			
	85	90	95
Ser Gly Leu Ser Thr Thr Ser Leu Asn Ser Met Met Ser Val Tyr Ser			
	100	105	110

Glu Thr Gly Asp Tyr Gly Asn Val Lys Val Ser Gly Glu Ile Leu Leu  
115 120 125  
His Ile Ser Tyr Cys Tyr Lys Thr Gly Gly Leu Tyr Ile Phe Val Lys  
130 135 140  
Asn Cys Arg Asn Leu Ala Ile Gly Asp Glu Lys Lys Gln Arg Thr Asp  
145 150 155 160  
Ala Tyr Val Lys Ser Tyr Leu Leu Pro Asp Lys Ser Arg Asn Asn Lys  
165 170 175  
Arg Lys Thr Lys Ile Arg Thr Gly Thr Asn Pro Glu Phe Asn Glu Thr  
180 185 190  
Leu Lys Tyr Thr Ile Ser His Thr Gln Leu Glu Thr Arg Thr Leu Gln  
195 200 205  
Leu Ser Val Trp His Tyr Asp Arg Phe Gly Arg Asn Ser Phe Leu Gly  
210 215 220  
Glu Val Glu Ile Pro Phe Asp Ser Trp Asn Phe Glu Asn Pro Thr Asp  
225 230 235 240  
Glu Trp Phe Val Leu Gln Pro Lys Val Glu Phe Ala Pro Asp Ile Gly  
245 250 255  
Leu Gln Tyr Lys Gly Glu Leu Thr Val Val Leu Arg Tyr Ile Pro Pro  
260 265 270  
Glu Glu Asn Leu Met Leu Pro Pro Glu Gln Leu Gln Gly Asn Lys Thr  
275 280 285  
Phe Lys Lys Gly Lys Lys Lys Glu Ser Pro Val Ile Ser Gly Gly Ile  
290 295 300  
Leu Glu Val Phe Ile Lys Glu Ala Lys Asn Leu Thr Ala Val Lys Ser  
305 310 315 320  
Gly Gly Thr Ser Asp Ser Phe Val Lys Gly Tyr Leu Leu Pro Asp Asp  
325 330 335  
Ser Lys Ala Thr Lys His Lys Thr Leu Val Ile Lys Lys Ser Val Asn



Ser Phe Gln Ile Ala Thr Leu Ile Cys Ser Thr Lys Leu Thr Gln Asn  
 65 70 75 80  
 Val Asp Leu Leu Gly Leu Leu Asn Trp Arg Ser Asn Ser Gln Asn Ile  
 85 90 95  
 Lys His Asn Leu Lys Lys Leu Met Glu Val Asp Gly Gly Glu Ile Val  
 100 105 110  
 Lys Phe Leu Gln Asp Thr Leu Asp Ala Leu Phe Asn Ile Met Met Glu  
 115 120 125  
 Met Ser Asp Ser Glu Thr Tyr Asp Phe Leu Val Phe Asp Ala Leu Val  
 130 135 140  
 Phe Ile Ile Ser Leu Ile Gly Asp Ile Lys Phe Gln His Phe Asn Pro  
 145 150 155 160  
 Val Leu Glu Thr Tyr Ile Tyr Lys His Phe Ser Ala Thr Leu Ala Tyr  
 165 170 175  
 Val Lys Leu Ser Lys Val Leu Asn Phe Tyr Val Ala Asn Ala Asp Asp  
 180 185 190  
 Ser Ser Lys Thr Glu Leu Leu Phe Ala Ala Leu Lys Ala Leu Lys Tyr  
 195 200 205  
 Leu Phe Arg Phe Ile Ile Gln Ser Arg Val Leu Tyr Leu Arg Phe Tyr  
 210 215 220  
 Gly Gln Ser Lys Asp Gly Asp Glu Phe Asn Asn Ser Ile Arg Gln Leu  
 225 230 235 240  
 Phe Leu Ala Phe Asn Met Leu Met Asp Arg Pro Leu Glu Glu Ala Val  
 245 250 255  
 Lys Ile Lys Gly Ala Ala Leu Lys Tyr Leu Pro Ser Ile Ile Asn Asp  
 260 265 270  
 Val Lys Leu Val Phe Asp Pro Val Glu Leu Ser Val Leu Phe Cys Lys  
 275 280 285  
 Phe Ile Gln Ser Ile Pro Asp Asn Gln Leu Val Arg Gln Lys Leu Asn

290	295	300
Cys Met Thr Lys Ile Val Glu Ser Thr Leu Phe Arg Gln Ser Glu Cys		
305	310	315
Arg Glu Val Leu Leu Pro Leu Leu Thr Asp Gln Leu Ser Gly Gln Leu		
325	330	335
Asp Asp Asn Ser Asn Lys Pro Asp His Glu Ala Ser Ser Gln Leu Leu		
340	345	350
Ser Asn Ile Leu Glu Val Leu Asp Arg Lys Asp Val Gly Ala Thr Ala		
355	360	365
Val His Ile Gln Leu Ile Met Glu Arg Leu Leu Arg Arg Ile Asn Arg		
370	375	380
Thr Val Ile Gly Met Asn Arg Gln Ser Pro His Ile Gly Ser Phe Val		
385	390	395
Ala Cys Met Ile Ala Leu Leu Gln Gln Met Asp Asp Ser His Tyr Ser		
405	410	415
His Tyr Ile Ser Thr Phe Lys Thr Arg Gln Asp Ile Ile Asp Phe Leu		
420	425	430
Met Glu Thr Phe Ile Met Phe Lys Asp Leu Ile Gly Lys Asn Val Tyr		
435	440	445
Ala Lys Asp Trp Met Val Met Asn Met Thr Gln Asn Arg Val Phe Leu		
450	455	460
Arg Ala Ile Asn Arg Phe Ala Glu Val Leu Thr Arg Phe Phe Met Asp		
465	470	475
Gln Ala Ser Phe Glu Leu Gln Leu Trp Asn Asn Tyr Phe His Leu Ala		
485	490	495
Val Ala Phe Leu Thr His Glu Ser Leu Gln Leu Glu Thr Phe Ser Gln		
500	505	510
Ala Lys Arg Asn Lys Ile Val Lys Lys Tyr Gly Asp Met Arg Lys Glu		
515	520	525

Ile Gly Phe Arg Ile Arg Asp Met Trp Tyr Asn Leu Gly Pro Pro Lys  
530 535 540  
Ile Lys Phe Ile Pro Ser Met Val Gly Pro Ile Leu Glu Val Thr Leu  
545 550 555 560  
Thr Pro Glu Val Glu Leu Arg Lys Ala Thr Ile Pro Ile Phe Phe Asp  
565 570 575  
Met Met Gln Cys Glu Phe Asn Phe Ser Gly Asn Gly Asn Phe His Met  
580 585 590  
Phe Glu Asn Glu Leu Ile Thr Lys Leu Asp Gln Glu Val Glu Gly Gly  
595 600 605  
Arg Gly Asp Glu Gln Tyr Lys Val Leu Leu Glu Lys Leu Leu Leu Glu  
610 615 620  
His Cys Arg Lys His Lys Tyr Leu Ser Ser Ser Gly Glu Val Phe Ala  
625 630 635 640  
Leu Leu Val Ser Ser Leu Leu Glu Asn Leu Leu Asp Tyr Arg Thr Ile  
645 650 655  
Ile Met Gln Asp Glu Ser Lys Glu Asn Arg Met Ser Cys Thr Val Asn  
660 665 670  
Val Leu Asn Phe Tyr  
675

&lt;210&gt; 2914

&lt;211&gt; 1277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

Met Ala Asn Arg Arg Val Gly Arg Gly Cys Trp Glu Val Ser Pro Thr

1	5	10	15
Glu Arg Arg Pro Pro Ala Gly Leu Arg Gly Pro Ala Ala Glu Glu Glu			
20	25	30	
Ala Ser Ser Pro Pro Val Leu Ser Leu Ser His Phe Cys Arg Ser Pro			
35	40	45	
Phe Leu Cys Phe Gly Asp Val Leu Leu Gly Ala Ser Arg Thr Leu Ser			
50	55	60	
Leu Ala Leu Asp Asn Pro Asn Glu Glu Val Ala Glu Val Lys Ile Ser			
65	70	75	80
His Phe Pro Ala Ala Asp Leu Gly Phe Ser Val Ser Gln Arg Cys Phe			
85	90	95	
Val Leu Gln Pro Lys Glu Lys Ile Val Ile Ser Val Asn Trp Thr Pro			
100	105	110	
Leu Lys Glu Gly Arg Val Arg Glu Ile Met Thr Phe Leu Val Asn Asp			
115	120	125	
Val Leu Lys His Gln Ala Ile Leu Leu Gly Asn Ala Glu Glu Gln Lys			
130	135	140	
Lys Lys Lys Arg Ser Leu Trp Asp Thr Ile Lys Lys Lys Lys Ile Ser			
145	150	155	160
Ala Ser Thr Ser His Asn Arg Arg Val Ser Asn Ile Gln Asn Val Asn			
165	170	175	
Lys Thr Phe Ser Val Ser Gln Lys Val Asp Arg Val Arg Ser Pro Leu			
180	185	190	
Gln Asp Cys Glu Asn Leu Ala Met Asn Glu Gly Gly Pro Pro Thr Glu			
195	200	205	
Asn Asn Ser Leu Ile Leu Glu Glu Asn Lys Ile Pro Ile Ser Pro Ile			
210	215	220	
Ser Pro Ala Phe Asn Glu Cys His Gly Ala Thr Cys Leu Pro Leu Ser			
225	230	235	240



Val Arg Arg Ser Thr Thr Tyr Ser Ser Leu His Ala Ser Glu Asn Arg  
245 250 255  
Glu Leu Leu Asn Val His Ser Ala Asn Val Ser Lys Val Ser Phe Asn  
260 265 270  
Glu Lys Ala Val Thr Glu Thr Ser Phe Asn Ser Val Asn Val Asn Gly  
275 280 285  
Gln Arg Gly Glu Asn Ser Lys Leu Ser Leu Thr Pro Asn Cys Ser Ser  
290 295 300  
Thr Leu Asn Ile Thr Gln Ser Gln Ile His Phe Leu Ser Pro Asp Ser  
305 310 315 320  
Phe Val Asn Asn Ser His Glu Ala Asn Asn Glu Leu Glu Leu Val Thr  
325 330 335  
Cys Leu Ser Ser Asp Met Phe Met Lys Asp Asn Ser Gln Pro Val His  
340 345 350  
Leu Glu Ser Thr Ile Ala His Glu Ile Tyr Gln Lys Ile Leu Ser Pro  
355 360 365  
Asp Ser Phe Ile Lys Asp Asn Tyr Gly Leu Asn Gln Asp Leu Glu Ser  
370 375 380  
Glu Ser Val Asn Pro Ile Leu Ser Pro Asn Gln Phe Leu Lys Asp Asn  
385 390 395 400  
Met Ala Tyr Met Cys Thr Ser Gln Gln Thr Cys Lys Val Pro Leu Ser  
405 410 415  
Asn Glu Asn Ser Gln Val Pro Gln Ser Pro Glu Asp Trp Arg Lys Ser  
420 425 430  
Glu Val Ser Pro Arg Ile Pro Glu Cys Gln Gly Ser Lys Ser Pro Lys  
435 440 445  
Ala Ile Phe Glu Glu Leu Val Glu Met Lys Ser Asn Tyr Tyr Ser Phe  
450 455 460  
Ile Lys Gln Asn Asn Pro Lys Phe Ser Ala Val Gln Asp Ile Ser Ser

465                      470                      475                      480  
 His Ser His Asn Lys Gln Pro Lys Arg Arg Pro Ile Leu Ser Ala Thr  
                                  485                      490                      495  
 Val Thr Lys Arg Lys Ala Thr Cys Thr Arg Glu Asn Gln Thr Glu Ile  
                                  500                      505                      510  
 Asn Lys Pro Lys Ala Lys Arg Cys Leu Asn Ser Ala Val Gly Glu His  
                                  515                      520                      525  
 Glu Lys Val Ile Asn Asn Gln Lys Glu Lys Glu Asp Phe His Ser Tyr  
                                  530                      535                      540  
 Leu Pro Ile Ile Asp Pro Ile Leu Ser Lys Ser Lys Ser Tyr Lys Asn  
 545                      550                      555                      560  
 Glu Val Thr Pro Ser Ser Thr Thr Ala Ser Val Ala Arg Lys Arg Lys  
                                  565                      570                      575  
 Ser Asp Gly Ser Met Glu Asp Ala Asn Val Arg Val Ala Ile Thr Glu  
                                  580                      585                      590  
 His Thr Glu Val Arg Glu Ile Lys Arg Ile His Phe Ser Pro Ser Glu  
                                  595                      600                      605  
 Pro Lys Thr Ser Ala Val Lys Lys Thr Lys Asn Val Thr Thr Pro Ile  
                                  610                      615                      620  
 Ser Lys Arg Ile Ser Asn Arg Glu Lys Leu Asn Leu Lys Lys Lys Thr  
 625                      630                      635                      640  
 Asp Leu Ser Ile Phe Arg Thr Pro Ile Ser Lys Thr Asn Lys Arg Thr  
                                  645                      650                      655  
 Lys Pro Ile Ile Ala Val Ala Gln Ser Ser Leu Thr Phe Ile Lys Pro  
                                  660                      665                      670  
 Leu Lys Thr Asp Ile Pro Arg His Pro Met Pro Phe Ala Ala Lys Asn  
                                  675                      680                      685  
 Met Phe Tyr Asp Glu Arg Trp Lys Glu Lys Gln Glu Gln Gly Phe Thr  
                                  690                      695                      700

Trp Trp Leu Asn Phe Ile Leu Thr Pro Asp Asp Phe Thr Val Lys Thr  
705 710 715 720  
Asn Ile Ser Glu Val Asn Ala Ala Thr Leu Leu Leu Gly Ile Glu Asn  
725 730 735  
Gln His Lys Ile Ser Val Pro Arg Ala Pro Thr Lys Glu Glu Met Ser  
740 745 750  
Leu Arg Ala Tyr Thr Ala Arg Cys Arg Leu Asn Arg Leu Arg Arg Ala  
755 760 765  
Ala Cys Arg Leu Phe Thr Ser Glu Lys Met Val Lys Ala Ile Lys Lys  
770 775 780  
Leu Glu Ile Glu Ile Glu Ala Arg Arg Leu Ile Val Arg Lys Asp Arg  
785 790 795 800  
His Leu Trp Lys Asp Val Gly Glu Arg Gln Lys Val Leu Asn Trp Leu  
805 810 815  
Leu Ser Tyr Asn Pro Leu Trp Leu Arg Ile Gly Leu Glu Thr Thr Tyr  
820 825 830  
Gly Glu Leu Ile Ser Leu Glu Asp Asn Ser Asp Val Thr Gly Leu Ala  
835 840 845  
Met Phe Ile Leu Asn Arg Leu Leu Trp Asn Pro Asp Ile Ala Ala Glu  
850 855 860  
Tyr Arg His Pro Thr Val Pro His Leu Tyr Arg Asp Gly His Glu Glu  
865 870 875 880  
Ala Leu Ser Lys Phe Thr Leu Lys Lys Leu Leu Leu Leu Val Cys Phe  
885 890 895  
Leu Asp Tyr Ala Lys Ile Ser Arg Leu Ile Asp His Asp Pro Cys Leu  
900 905 910  
Phe Cys Lys Asp Ala Glu Phe Lys Ala Ser Lys Glu Ile Leu Leu Ala  
915 920 925  
Phe Ser Arg Asp Phe Leu Ser Gly Glu Gly Asp Leu Ser Arg His Leu

930                                      935                                      940  
Gly Leu Leu Gly Leu Pro Val Asn His Val Gln Thr Pro Phe Asp Glu  
945                                      950                                      955                                      960  
Phe Asp Phe Ala Val Thr Asn Leu Ala Val Asp Leu Gln Cys Gly Val  
                                    965                                      970                                      975  
Arg Leu Val Arg Thr Met Glu Leu Leu Thr Gln Asn Trp Asp Leu Ser  
                                    980                                      985                                      990  
Lys Lys Leu Arg Ile Pro Ala Ile Ser Arg Leu Gln Lys Met His Asn  
                                    995                                      1000                                      1005  
Val Asp Ile Val Leu Gln Val Leu Lys Ser Arg Gly Ile Glu Leu Ser  
1010                                      1015                                      1020  
Asp Glu His Gly Asn Thr Ile Leu Ser Lys Asp Ile Val Asp Arg His  
1025                                      1030                                      1035                                      1040  
Arg Glu Lys Thr Leu Arg Leu Leu Trp Lys Ile Ala Phe Ala Phe Gln  
                                    1045                                      1050                                      1055  
Val Asp Ile Ser Leu Asn Leu Asp Gln Leu Lys Glu Glu Ile Ala Phe  
                                    1060                                      1065                                      1070  
Leu Lys His Thr Lys Ser Ile Lys Lys Thr Ile Ser Leu Leu Ser Cys  
                                    1075                                      1080                                      1085  
His Ser Asp Asp Leu Ile Asn Lys Lys Lys Gly Lys Arg Asp Ser Gly  
1090                                      1095                                      1100  
Ser Phe Glu Gln Tyr Ser Glu Asn Ile Lys Leu Leu Met Asp Trp Val  
1105                                      1110                                      1115                                      1120  
Asn Ala Val Cys Ala Phe Tyr Asn Lys Lys Val Glu Asn Phe Thr Val  
                                    1125                                      1130                                      1135  
Ser Phe Ser Asp Gly Arg Val Leu Cys Tyr Leu Ile His His Tyr His  
                                    1140                                      1145                                      1150  
Pro Cys Tyr Val Pro Phe Asp Ala Ile Cys Gln Arg Thr Thr Gln Thr  
1155                                      1160                                      1165

Val Glu Cys Thr Gln Thr Gly Ser Val Val Leu Asn Ser Ser Ser Glu

1170

1175

1180

Ser Asp Asp Ser Ser Leu Asp Met Ser Leu Lys Ala Phe Asp His Glu

1185

1190

1195

1200

Asn Thr Ser Glu Leu Tyr Lys Glu Leu Leu Glu Asn Glu Lys Lys Asn

1205

1210

1215

Phe His Leu Val Arg Ser Ala Val Arg Asp Leu Gly Gly Ile Pro Ala

1220

1225

1230

Met Ile Asn His Ser Asp Thr Ser Asn Thr Ile Pro Asp Glu Lys Val

1235

1240

1245

Val Ile Thr Tyr Leu Ser Phe Leu Cys Ala Arg Leu Leu Asp Leu Arg

1250

1255

1260

Lys Glu Ile Arg Ala Ala Arg Leu Ile Gln Thr Thr Trp

1265

1270

1275

&lt;210&gt; 2915

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2915

Met Pro Leu His Leu Ala Gly Phe Phe Phe Leu Ala Ala Tyr Ser Gln

1

5

10

15

Pro Cys Ser Phe Ser Arg Ser Pro Leu Gln Gly Thr Leu Pro His Asp

20

25

30

Ser Gly Gln Gln His Leu Lys Thr Thr Ala Asp Asp Leu Leu Gly Val

35

40

45

Cys His Gln Gln Ser Pro Gly Leu Gly Gln Lys Glu Arg Thr Thr Gln

50	55	60	
Ser Val Glu Arg Thr Glu Leu Gly Arg Leu Arg Val Ile Asp Val Ile			
65	70	75	80
Pro Gln His Val Glu Gly Val Val Arg Thr Ala Pro Glu Val Glu Ala			
	85	90	95
Val Lys Val Leu Ser Glu Val Leu Pro Pro Ala His Ile Gln Gln Val			
100	105	110	
Ala Gly Glu Leu Ile Lys Ala Leu Gln Arg Gly Val Gln Asn Asn Glu			
115	120	125	
His Asp Ser Gln Glu Cys Gln Ser Leu Lys Pro Phe Gln Val Phe Val			
130	135	140	
Ser Gln Asp Pro Ile Val Leu Thr Gly Asp Gln Ala Asn Leu Val Asp			
145	150	155	160
His Lys Leu Leu			

&lt;210&gt; 2916

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2916

Met Gln Phe Leu His Ser Val Val Gly Leu Tyr Ile Leu Val Cys Phe			
1	5	10	15
Cys Ser Gly Trp Tyr Arg Phe Phe Leu Ser Ile Phe Ser Ala Ser Phe			
20	25	30	
Arg Ser Ser Cys Lys Ala Gly Leu Val Val Thr Glu Ser Leu Ser Ile			
35	40	45	

Cys Leu Ser Val Lys Asp Phe Ile Ser Pro Ser Leu Met Lys Leu Ser  
 50 55 60  
 Leu Ala Gly Tyr Glu Ile Leu Cys Leu Lys Phe Phe Ser Leu Arg Ile  
 65 70 75 80  
 Leu Asn Ile Gly Leu His Cys Leu Leu Ala Cys Arg Val Ser Ala Glu  
 85 90 95  
 Arg Ser Ala Val Ser Leu Trp Ala Ser Leu Cys Arg  
 100 105

<210> 2917

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 2917

Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly  
 1 5 10 15  
 Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro  
 20 25 30  
 His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe  
 35 40 45  
 Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala  
 50 55 60  
 Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro  
 65 70 75 80  
 Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser  
 85 90 95  
 Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu

100	105	110
Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala		
115	120	125
Ala Pro Lys Pro Val Tyr Arg Asn Pro Leu Cys Tyr Gly Leu Ser Thr		
130	135	140
Cys Leu Gly Glu Gly Ala Val Lys Arg Pro Leu Asp Val Asp Trp Thr		
145	150	155
Leu Ala Thr Gly Pro Leu Leu Pro Ser Ala Asp Pro Pro Cys Ser Leu		
165	170	175
Ala Pro Ala Pro Ser Lys Gly Gln Thr Leu Asp Gly Thr Phe Leu Arg		
180	185	190
Gly Val Pro Ala Glu Gly Ser Ser Lys Asp Ser Ser Gly Ser Phe Ser		
195	200	205
Pro Cys Gln Pro Phe Leu Glu Lys Tyr Gln Thr Ile His Ser Thr Gly		
210	215	220
Phe Leu Ala Ser Arg Tyr Thr Gly Pro Tyr Pro Arg Asn Ser Lys Gln		
225	230	235
Ala Met Ser Glu Gly Pro Ser Ser Pro Trp Thr Gln Leu Ala Gln Pro		
245	250	255
Leu Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Pro Pro		
260	265	270
His His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Ala		
275	280	285
Cys Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Leu		
290	295	300
Gln Pro Leu Gly Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Leu		
305	310	315
Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr Ile Pro		
325	330	335



Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala  
340 345 350  
Pro Ser Pro Gly Leu Lys Leu Glu Pro Pro Leu Thr Pro Arg Cys Pro  
355 360 365  
Leu Asp Phe Ala Pro Gln Thr Leu Ser Phe Pro Tyr Ala Arg Asp Asp  
370 375 380  
Leu Ser Leu Tyr Gly Ala Ser Pro Gly Leu Gly Gly Thr Pro Pro Ser  
385 390 395 400  
Gln Asn Asn Val Arg Ala Val Pro Gln Pro Gly Ala Phe Gln Arg Ala  
405 410 415  
Cys Gln Pro Leu Pro Ala Ser Gln Pro Cys Ser Glu Pro Val Arg Pro  
420 425 430  
Ala Gln Glu Ala Glu Glu Lys Thr Trp Leu Pro Ser Cys Arg Lys Glu  
435 440 445  
Lys Leu Gln Pro Arg Leu Ser Glu His Ser Gly Pro Pro Ile Val Ile  
450 455 460  
Arg Asp Ser Pro Val Pro Cys Thr Pro Pro Ala Leu Pro Pro Cys Ala  
465 470 475 480  
Arg Glu Cys Gln Ser Leu Pro Gln Lys Glu Asp Ala Arg Pro Pro Ser  
485 490 495  
Ser Pro Pro Met Pro Val Ile Asp Asn Val Phe Ser Leu Ala Pro Tyr  
500 505 510  
Arg Asp Tyr Leu Asp Val Pro Ala Pro Glu Ala Thr Thr Glu Pro Asp  
515 520 525  
Ser Ala Thr Ala Glu Pro Asp Ser Ala Pro Ala Thr Ser Glu Gly Gln  
530 535 540  
Asp Lys Gly Cys Arg Gly Thr Leu Pro Ala Gln Glu Gly Pro Ser Gly  
545 550 555 560  
Ser Lys Pro Leu Arg Gly Ser Leu Lys Glu Glu Val Ala Leu Asp Leu

565 570 575  
Ser Val Arg Lys Pro Thr Ala Glu Ala Ser Pro Val Lys Ala Ser Arg  
580 585 590  
Ser Val Glu His Ala Lys Pro Thr Ala Ala Met Asp Val Pro Asp Val  
595 600 605  
Gly Asn Met Val Ser Asp Leu Pro Gly Leu Lys Lys Ile Asp Thr Glu  
610 615 620  
Ala Pro Gly Leu Pro Gly Val Pro Val Thr Thr Asp Ala Met Pro Arg  
625 630 635 640  
Thr Asn Phe His Ser Ser Val Ala Phe Met Phe Arg Lys Phe Lys Ile  
645 650 655  
Leu Arg Pro Ala Pro Leu Pro Ala Ala Val Val Pro Ser Thr Pro Thr  
660 665 670  
Ser Ala Pro Ala Pro Thr Gln Pro Ala Pro Thr Pro Thr Ser Gly Pro  
675 680 685  
Ile Gly Leu Arg Ile Leu Ala Gln Gln Pro Leu Ser Val Thr Cys Phe  
690 695 700  
Ser Leu Ala Leu Pro Ser Pro Pro Ala Val Ala Val Ala Ser Pro Ala  
705 710 715 720  
Pro Ala Pro Ala Pro Ser Pro Ala Pro Ala Arg Ala Gln Ala Pro Ala  
725 730 735  
Ser Ala Arg Asp Pro Ala Pro Ala Pro Ala Pro Val Ala Gly Pro Ala  
740 745 750  
Pro Ala Ser Thr Ser Ala Pro Gly Asp Ser Leu Glu Gln His Phe Thr  
755 760 765  
Gly Leu His Ala Ser Leu Cys Asp Ala Ile Ser Gly Ser Val Ala His  
770 775 780  
Ser Pro Pro Glu Lys Leu Arg Glu Trp Leu Glu Thr Ala Gly Pro Trp  
785 790 795 800

Gly Gln Ala Ala Trp Gln Asp Cys Gln Gly Val Gln Gly Leu Leu Ala  
805 810 815  
Lys Leu Leu Ser Gln Leu Gln Arg Phe Asp Arg Thr His Arg Cys Pro  
820 825 830  
Phe Pro His Val Val Arg Ala Gly Ala Ile Phe Val Pro Ile His Leu  
835 840 845  
Val Lys Glu Arg Leu Phe Pro Arg Leu Pro Pro Ala Ser Val Asp His  
850 855 860  
Val Leu Gln Glu His Arg Val Glu Leu Arg Pro Thr Thr Leu Ser Glu  
865 870 875 880  
Glu Arg Ala Leu Arg Glu Leu Ala Leu Pro Gly Cys Thr Ser Arg Met  
885 890 895  
Leu Lys Leu Leu Ala Leu Arg Gln Leu Pro Asp Ile Tyr Pro Asp Leu  
900 905 910  
Leu Gly Leu Gln Trp Arg Asp Cys Val Arg Arg Gln Leu Gly Asp Phe  
915 920 925  
Asp Thr Glu Ala Gly Ala Val Ser Ser Ser Glu Pro Thr Val Ala Arg  
930 935 940  
Asp Glu Pro Glu Ser Leu Ala Leu Ala Gln Lys Ser Pro Ala Pro Lys  
945 950 955 960  
Val Arg Lys Pro Gly Arg Lys Pro Pro Thr Pro Gly Pro Glu Lys Ala  
965 970 975  
Glu Ala Ala Ala Gly Glu Glu Ser Cys Gly Ala Ser Pro Thr Pro Ala  
980 985 990  
Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser  
995 1000 1005  
Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly  
1010 1015 1020  
His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu

1025                      1030                      1035                      1040  
Asp Ser Gln Ser His His Leu  
1045

<210> 2918

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2918

Met Ser Pro Ser Ser Thr Trp Val Arg Asn Phe Phe Thr Phe Ser Asn  
1                      5                      10                      15  
Ser Ala Leu Ala Cys Ser Pro Ser Phe Leu Ser Ser Thr Pro Val Ser  
20                      25                      30  
Glu Arg Ser Thr Ile Pro Cys Ser Ile Arg Asp Leu Val Arg Cys Ser  
35                      40                      45  
Met Gly Thr Val Ala Ser Thr Ser Ser Leu Thr Val Asp Asp Phe Leu  
50                      55                      60  
Ser Met Asp Pro Phe Ile Leu Leu Lys Ala Gly Leu Gly Ser Leu Ser  
65                      70                      75                      80  
Ser Thr Thr Val Ser Asp Arg Ala Leu Val Val Gln Gly Glu Ser Lys  
85                      90                      95  
His Phe Ser Arg Ile Asp Thr Lys Cys Ser Ser Phe Glu Leu Val Arg  
100                      105                      110  
Gly Asn Leu Asn Gln Lys Leu Leu Gln Ala Arg Lys Met Ser Val Cys  
115                      120                      125  
Arg Ser Thr Arg  
130

&lt;210&gt; 2919

&lt;211&gt; 581

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

Met Pro Leu Lys His Tyr Leu Leu Leu Leu Val Gly Cys Gln Ala Trp

1 5 10 15

Gly Ala Gly Leu Ala Tyr His Gly Cys Pro Ser Glu Cys Thr Cys Ser

20 25 30

Arg Ala Ser Gln Val Glu Cys Thr Gly Ala Arg Ile Val Ala Val Pro

35 40 45

Thr Pro Leu Pro Trp Asn Ala Met Ser Leu Gln Ile Leu Asn Thr His

50 55 60

Ile Thr Glu Leu Asn Glu Ser Pro Phe Leu Asn Ile Ser Ala Leu Ile

65 70 75 80

Ala Leu Arg Ile Glu Lys Asn Glu Leu Ser Arg Ile Thr Pro Gly Ala

85 90 95

Phe Arg Asn Leu Gly Ser Leu Arg Tyr Leu Ser Leu Ala Asn Asn Lys

100 105 110

Leu Gln Val Leu Pro Ile Gly Leu Phe Gln Gly Leu Asp Ser Leu Glu

115 120 125

Ser Leu Leu Leu Ser Ser Asn Gln Leu Leu Gln Ile Gln Pro Ala His

130 135 140

Phe Ser Gln Cys Ser Asn Leu Lys Glu Leu Gln Leu His Gly Asn His

145 150 155 160

Leu Glu Tyr Ile Pro Asp Gly Ala Phe Asp His Leu Val Gly Leu Thr

165	170	175
Lys Leu Asn Leu Gly Lys Asn Ser Leu Thr His Ile Ser Pro Arg Val		
180	185	190
Phe Gln His Leu Gly Asn Leu Gln Val Leu Arg Leu Tyr Glu Asn Arg		
195	200	205
Leu Thr Asp Ile Pro Met Gly Thr Phe Asp Gly Leu Val Asn Leu Gln		
210	215	220
Glu Leu Ala Leu Gln Gln Asn Gln Ile Gly Leu Leu Ser Pro Gly Leu		
225	230	235
240		
Phe His Asn Asn His Asn Leu Gln Arg Leu Tyr Leu Ser Asn Asn His		
245	250	255
Ile Ser Gln Leu Pro Pro Ser Val Phe Met Gln Leu Pro Gln Leu Asn		
260	265	270
Arg Leu Thr Leu Phe Gly Asn Ser Leu Lys Glu Leu Ser Pro Gly Ile		
275	280	285
Phe Gly Pro Met Pro Asn Leu Arg Glu Leu Trp Leu Tyr Asp Asn His		
290	295	300
Ile Ser Ser Leu Pro Asp Asn Val Phe Ser Asn Leu Arg Gln Leu Gln		
305	310	315
320		
Val Leu Ile Leu Ser Arg Asn Gln Ile Ser Phe Ile Ser Pro Gly Ala		
325	330	335
Phe Asn Gly Leu Thr Glu Leu Arg Glu Leu Ser Leu His Thr Asn Ala		
340	345	350
Leu Gln Asp Leu Asp Gly Asn Val Phe Arg Met Leu Ala Asn Leu Gln		
355	360	365
Asn Ile Ser Leu Gln Asn Asn Arg Leu Arg Gln Leu Pro Gly Asn Ile		
370	375	380
Phe Ala Asn Val Asn Gly Leu Met Ala Ile Gln Leu Gln Asn Asn Gln		
385	390	395
400		

Leu Glu Asn Leu Pro Leu Gly Ile Phe Asp His Leu Gly Lys Leu Cys

405

410

415

Glu Leu Arg Leu Tyr Asp Asn Pro Trp Arg Cys Asp Ser Asp Ile Leu

420

425

430

Pro Leu Arg Asn Trp Leu Leu Leu Asn Gln Pro Arg Leu Gly Thr Asp

435

440

445

Thr Val Pro Val Cys Phe Ser Pro Ala Asn Val Arg Gly Gln Ser Leu

450

455

460

Ile Ile Ile Asn Val Asn Val Val Val Pro Ser Val His Val Pro Glu

465

470

475

480

Val Pro Ser Tyr Pro Glu Thr Pro Trp Tyr Pro Asp Thr Pro Ser Tyr

485

490

495

Pro Asp Thr Thr Ser Val Ser Ser Thr Thr Glu Leu Thr Ser Pro Val

500

505

510

Glu Asp Tyr Thr Asp Leu Thr Thr Ile Gln Val Thr Asp Asp Arg Ser

515

520

525

Val Trp Gly Met Thr Gln Ala Gln Ser Gly Leu Ala Ile Ala Ala Ile

530

535

540

Val Ile Gly Ile Val Ala Leu Ala Cys Ser Leu Ala Ala Cys Val Gly

545

550

555

560

Cys Cys Cys Cys Lys Lys Arg Ser Gln Ala Val Leu Met Gln Met Lys

565

570

575

Ala Pro Asn Glu Cys

580

&lt;210&gt; 2920

&lt;211&gt; 1252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2920

Met Leu Tyr Ala Cys Ala Arg Asn Met Ile Ser Thr Val Lys Met Phe  
 1 5 10 15  
 Leu Lys Ser Lys Gly Thr Lys Glu Leu Glu Val Asn Cys Leu Asn Gln  
 20 25 30  
 Val Lys Ser Ser Leu Leu Lys Thr Ser Lys Ser Leu Arg Gln Asn Leu  
 35 40 45  
 Gly Lys Lys Leu Asp Lys Glu Asp Lys Val Arg Glu Cys Gln Leu Gln  
 50 55 60  
 Val Phe Leu Arg Leu Glu Met Cys Leu Gln Cys Pro Ser Ile Asn Glu  
 65 70 75 80  
 Ser Thr Asp Asp Met Glu Gln Val Val Glu Glu Val Thr Asp Leu Leu  
 85 90 95  
 Arg Met Val Cys Leu Thr Glu Asp Ser Ala Tyr Leu Ala Glu Phe Leu  
 100 105 110  
 Glu Glu Ile Leu Arg Leu Tyr Ile Asp Ser Ile Pro Lys Thr Leu Gly  
 115 120 125  
 Asn Leu Tyr Asn Ser Leu Gly Phe Val Ile Pro Gln Lys Leu Ala Gly  
 130 135 140  
 Val Leu Pro Thr Asp Phe Phe Ser Asp Asp Ser Met Thr Gln Glu Asn  
 145 150 155 160  
 Lys Ser Pro Leu Leu Ser Val Pro Phe Leu Ser Ser Ala Arg Arg Ser  
 165 170 175  
 Val Ser Gly Ser Pro Glu Ser Asp Glu Leu Gln Glu Leu Arg Thr Arg  
 180 185 190  
 Ser Ala Lys Lys Arg Arg Lys Asn Ala Leu Ile Arg His Lys Ser Ile  
 195 200 205



Ala Glu Val Ser Gln Asn Leu Arg Gln Ile Glu Ile Pro Lys Val Ser  
 210 215 220  
 Lys Arg Ala Thr Lys Lys Glu Asn Ser His Pro Ala Pro Gln Gln Pro  
 225 230 235 240  
 Ser Gln Pro Val Lys Asp Thr Val Gln Glu Val Thr Lys Val Arg Arg  
 245 250 255  
 Asn Leu Phe Asn Gln Glu Leu Leu Ser Pro Ser Lys Arg Ser Leu Lys  
 260 265 270  
 Arg Gly Leu Pro Arg Ser His Ser Val Ser Ala Val Asp Gly Leu Glu  
 275 280 285  
 Asp Lys Leu Asp Asn Phe Lys Lys Asn Lys Gly Tyr His Lys Leu Leu  
 290 295 300  
 Thr Lys Ser Val Ala Glu Thr Pro Val His Lys Gln Ile Ser Lys Arg  
 305 310 315 320  
 Leu Leu His Arg Gln Ile Lys Gly Arg Ser Ser Asp Pro Gly Pro Asp  
 325 330 335  
 Ile Gly Val Val Glu Glu Ser Pro Glu Lys Gly Asp Glu Ile Gly Leu  
 340 345 350  
 Arg Arg Ser Pro Arg Ile Lys Gln Leu Ser Phe Ser Arg Thr His Ser  
 355 360 365  
 Ala Ser Phe Tyr Ser Val Ser Gln Pro Lys Ser Arg Ser Val Gln Arg  
 370 375 380  
 Val His Ser Phe Gln Gln Asp Lys Ser Asp Gln Arg Glu Asn Ser Pro  
 385 390 395 400  
 Val Gln Ser Ile Arg Ser Pro Lys Ser Leu Leu Phe Gly Ala Met Ser  
 405 410 415  
 Glu Met Ile Ser Pro Ser Glu Lys Gly Ser Ala Arg Met Lys Lys Arg  
 420 425 430  
 Ser Arg Asn Thr Leu Asp Ser Glu Val Pro Ala Ala Tyr Gln Thr Pro

435	440	445
Lys Lys Ser His Gln Lys Ser Leu Ser Phe Ser Lys Thr Thr Pro Arg		
450	455	460
Arg Ile Ser His Thr Pro Gln Thr Pro Leu Tyr Thr Pro Glu Arg Leu		
465	470	475
Gln Lys Ser Pro Ala Lys Met Thr Pro Thr Lys Gln Ala Ala Phe Lys		
485	490	495
Glu Ser Leu Lys Asp Ser Ser Ser Pro Gly His Asp Ser Pro Leu Asp		
500	505	510
Ser Lys Ile Thr Pro Gln Lys Arg His Thr Gln Ala Gly Glu Gly Thr		
515	520	525
Ser Leu Glu Thr Lys Thr Pro Arg Thr Pro Lys Arg Gln Gly Thr Gln		
530	535	540
Pro Pro Gly Phe Leu Pro Asn Cys Thr Trp Pro His Ser Val Asn Ser		
545	550	555
Ser Pro Glu Ser Pro Ser Cys Pro Ala Pro Pro Thr Ser Ser Thr Ala		
565	570	575
Gln Pro Arg Arg Glu Cys Leu Thr Pro Ile Arg Asp Pro Leu Arg Thr		
580	585	590
Pro Pro Arg Ala Ala Ala Phe Met Gly Thr Pro Gln Asn Gln Thr His		
595	600	605
Gln Gln Pro His Val Leu Arg Ala Ala Arg Ala Glu Glu Pro Ala Gln		
610	615	620
Lys Leu Lys Asp Lys Ala Ile Lys Thr Pro Lys Arg Pro Gly Asn Ser		
625	630	635
Thr Val Thr Ser Ser Pro Pro Val Thr Pro Lys Lys Leu Phe Thr Ser		
645	650	655
Pro Leu Cys Asp Val Ser Lys Lys Ser Pro Phe Arg Lys Ser Lys Ile		
660	665	670

Glu Cys Pro Ser Pro Gly Glu Leu Asp Gln Lys Glu Pro Gln Met Ser  
675 680 685

Pro Ser Val Ala Ala Ser Leu Ser Cys Pro Val Pro Ser Thr Pro Pro  
690 695 700

Glu Leu Ser Gln Arg Ala Thr Leu Asp Thr Ile Pro Pro Pro Pro Pro  
705 710 715 720

Ser Lys Val Gly Lys Arg Cys Arg Lys Thr Ser Asp Pro Arg Arg Ser  
725 730 735

Ile Val Glu Cys Gln Pro Asp Ala Ser Ala Thr Pro Gly Val Gly Thr  
740 745 750

Ala Asp Ser Pro Ala Ala Pro Thr Asp Ser Arg Asp Asp Gln Lys Gly  
755 760 765

Leu Ser Leu Ser Pro Gln Ser Pro Pro Glu Arg Arg Gly Tyr Pro Gly  
770 775 780

Pro Gly Leu Arg Ser Asp Trp His Ala Ser Ser Pro Leu Leu Ile Thr  
785 790 795 800

Ser Asp Thr Glu His Val Thr Leu Leu Ser Glu Ala Glu His His Gly  
805 810 815

Ile Gly Asp Leu Lys Ser Asn Val Leu Ser Val Glu Glu Gly Glu Gly  
820 825 830

Leu Arg Thr Ala Asp Ala Glu Lys Ser Ser Leu Ser His Pro Gly Ile  
835 840 845

Pro Pro Ser Pro Pro Ser Cys Gly Pro Gly Ser Pro Leu Met Pro Ser  
850 855 860

Arg Asp Val His Cys Thr Thr Asp Gly Arg Gln Cys Gln Ala Ser Ala  
865 870 875 880

Gln Leu Asp Asn Leu Pro Ala Ser Ala Trp His Ser Thr Asp Ser Ala  
885 890 895

Ser Pro Gln Thr Tyr Glu Val Glu Leu Glu Met Gln Ala Ser Gly Leu

900 905 910  
Pro Lys Leu Arg Ile Lys Lys Ile Asp Pro Ser Ser Ser Leu Glu Ala  
915 920 925  
Glu Pro Leu Ser Lys Glu Glu Ser Ser Leu Gly Glu Glu Ser Phe Leu  
930 935 940  
Pro Ala Leu Ser Met Pro Arg Ala Ser Arg Ser Leu Ser Lys Pro Glu  
945 950 955 960  
Pro Thr Tyr Val Ser Pro Pro Cys Pro Arg Leu Ser His Ser Thr Pro  
965 970 975  
Gly Lys Ser Arg Gly Gln Thr Tyr Ile Cys Gln Ala Cys Thr Pro Thr  
980 985 990  
His Gly Pro Ser Ser Thr Pro Ser Pro Phe Gln Thr Asp Gly Val Pro  
995 1000 1005  
Trp Thr Pro Ser Pro Lys His Ser Gly Lys Thr Thr Pro Asp Ile Ile  
1010 1015 1020  
Lys Asp Trp Pro Arg Arg Lys Arg Ala Val Gly Cys Gly Ala Gly Ser  
1025 1030 1035 1040  
Ser Ser Gly Arg Gly Glu Val Gly Ala Asp Leu Pro Gly Ser Leu Ser  
1045 1050 1055  
Leu Leu Glu Ser Glu Gly Lys Asp His Gly Leu Glu Leu Ser Ile His  
1060 1065 1070  
Arg Thr Pro Ile Leu Glu Asp Phe Glu Leu Glu Gly Val Cys Gln Leu  
1075 1080 1085  
Pro Asp Gln Ser Pro Pro Arg Asn Ser Met Pro Lys Ala Glu Glu Ala  
1090 1095 1100  
Ser Ser Trp Gly Gln Phe Gly Leu Ser Ser Arg Lys Arg Val Leu Leu  
1105 1110 1115 1120  
Ala Lys Glu Glu Ala Asp Arg Gly Ala Lys Arg Ile Cys Asp Leu Arg  
1125 1130 1135

Glu Asp Ser Glu Val Ser Lys Ser Lys Glu Gly Ser Pro Ser Trp Ser

1140

1145

1150

Ala Trp Gln Leu Pro Ser Thr Gly Asp Glu Glu Val Phe Val Ser Gly

1155

1160

1165

Ser Thr Pro Pro Pro Ser Cys Ala Val Arg Ser Cys Leu Ser Ala Ser

1170

1175

1180

Ala Leu Gln Ala Leu Thr Gln Ser Pro Leu Leu Phe Gln Gly Lys Thr

1185

1190

1195

1200

Pro Ser Ser Gln Ser Lys Asp Pro Arg Asp Glu Asp Val Asp Val Leu

1205

1210

1215

Pro Ser Thr Val Glu Asp Ser Pro Phe Ser Arg Ala Phe Ser Arg Arg

1220

1225

1230

Arg Pro Ile Ser Arg Thr Tyr Thr Arg Lys Lys Leu Met Gly Thr Trp

1235

1240

1245

Leu Glu Asp Leu

1250

&lt;210&gt; 2921

&lt;211&gt; 654

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2921

Met Tyr Ser Ser Ser Cys Glu Thr Thr Arg Asn Thr Thr Gly Ile Glu

1

5

10

15

Glu Ser Thr Asp Gly Met Ile Leu Gly Pro Glu Asp Leu Ser Tyr Gln

20

25

30

Ile Tyr Asp Val Ser Gly Glu Ser Asn Ser Ala Val Ser Thr Glu Asp

35	40	45
Leu Lys Glu Cys Leu Lys Lys Gln Leu Glu Phe Cys Phe Ser Arg Glu		
50	55	60
Asn Leu Ser Lys Asp Leu Tyr Leu Ile Ser Gln Met Asp Ser Asp Gln		
65	70	75
80		
Phe Ile Pro Ile Trp Thr Val Ala Asn Met Glu Glu Ile Lys Lys Leu		
85	90	95
Thr Thr Asp Pro Asp Leu Ile Leu Glu Val Leu Arg Ser Ser Pro Met		
100	105	110
Val Gln Val Asp Glu Lys Gly Glu Lys Val Arg Pro Ser His Lys Arg		
115	120	125
Cys Ile Val Ile Leu Arg Glu Ile Pro Glu Thr Thr Pro Ile Glu Glu		
130	135	140
Val Lys Gly Leu Phe Lys Ser Glu Asn Cys Pro Lys Val Ile Ser Cys		
145	150	155
160		
Glu Phe Ala His Asn Ser Asn Trp Tyr Ile Thr Phe Gln Ser Asp Thr		
165	170	175
Asp Ala Gln Gln Ala Phe Lys Tyr Leu Arg Glu Glu Val Lys Thr Phe		
180	185	190
Gln Gly Lys Pro Ile Met Ala Arg Ile Lys Ala Ile Asn Thr Phe Phe		
195	200	205
Ala Lys Asn Gly Tyr Arg Leu Met Asp Ser Ser Ile Tyr Ser His Pro		
210	215	220
Ile Gln Thr Gln Ala Gln Tyr Ala Ser Pro Val Phe Met Gln Pro Val		
225	230	235
240		
Tyr Asn Pro His Gln Gln Tyr Ser Val Tyr Ser Ile Val Pro Gln Ser		
245	250	255
Trp Ser Pro Asn Pro Thr Pro Tyr Phe Glu Thr Pro Leu Ala Pro Phe		
260	265	270

Pro Asn Gly Ser Phe Val Asn Gly Phe Asn Ser Pro Gly Ser Tyr Lys  
 275 280 285  
 Thr Asn Ala Ala Ala Met Asn Met Gly Arg Pro Phe Gln Lys Asn Arg  
 290 295 300  
 Val Lys Pro Gln Phe Arg Ser Ser Gly Gly Ser Glu His Ser Thr Glu  
 305 310 315 320  
 Gly Ser Val Ser Leu Gly Asp Gly Gln Leu Asn Arg Tyr Ser Ser Arg  
 325 330 335  
 Asn Phe Pro Ala Glu Arg His Asn Pro Thr Val Thr Gly His Gln Glu  
 340 345 350  
 Gln Thr Tyr Leu Gln Lys Glu Thr Ser Thr Leu Gln Val Glu Gln Asn  
 355 360 365  
 Gly Asp Tyr Gly Arg Gly Arg Arg Thr Leu Phe Arg Gly Arg Arg Arg  
 370 375 380  
 Arg Glu Asp Asp Arg Ile Ser Arg Pro His Pro Ser Thr Ala Glu Ser  
 385 390 395 400  
 Lys Ala Pro Thr Pro Lys Phe Asp Leu Leu Ala Ser Asn Phe Pro Pro  
 405 410 415  
 Leu Pro Gly Ser Ser Ser Arg Met Pro Gly Glu Leu Val Leu Glu Asn  
 420 425 430  
 Arg Met Ser Asp Val Val Lys Gly Val Tyr Lys Glu Lys Asp Asn Glu  
 435 440 445  
 Glu Leu Thr Ile Ser Cys Pro Val Pro Ala Asp Glu Gln Thr Glu Cys  
 450 455 460  
 Thr Ser Ala Gln Gln Leu Asn Met Ser Thr Ser Ser Pro Cys Ala Ala  
 465 470 475 480  
 Glu Leu Thr Ala Leu Ser Thr Thr Gln Gln Glu Lys Asp Leu Ile Glu  
 485 490 495  
 Asp Ser Ser Val Gln Lys Asp Gly Leu Asn Gln Thr Thr Ile Pro Val

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